

REMARKS

The Applicants would like to thank Examiner Chen for the interview extended to Mr. Passey and Applicants' counsel. As set forth in the interview, the Office Action mailed October 12, 2007 has been received and reviewed. By way of summary, Claims 1-12, 43, 62-75 were previously pending in the Application. In the present amendment, Applicants have cancelled Claims 62-70 and 74 without prejudice or disclaimer and amended Claims 1-2, 5-8, 43, and 75. Claims 3-4, 9-12, and 71-73 remain as previously presented. In addition, Applicants have added new claims 76-98. Thus, after entry of this amendment, Claims 1-12, 43, 71-73, 75-98 are pending for consideration. Accordingly, Applicants respectfully request the Examiner to reconsider the Application in view of the amendments set forth and the following arguments.

A. Discussion of Rejection of Claims 62, 67, and 75 for Nonstatutory Obviousness-Type Double Patenting

The Office Action rejected Claims 62, 67, and 75 on the basis of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1 and 5 of U.S. Patent No. 7,146,524. Applicants respectfully disagree with and specifically traverse the rejection.

First, Applicants contend that there is no double patenting because Claims 62, 67, and 75 are directed to different inventions than Claims 1 and 5 of U.S. Patent No. 7,146,524. For example, Claim 1 of U.S. Patent No. 7,146,524 claims "[a] method for providing a virtual hot spare in an intelligent distributed file system" comprising "designating a first cluster comprised of a plurality of storage modules, the plurality of storage modules having free space which is not currently allocated and which is available for use to store data of sufficient value that error correction is desirable for such data," "upon failure of one of the plurality of storage modules, dynamically allocating storage space within the free space for recovery of data stored on the failed one of the plurality of storage modules," "receiving information from the plurality of data storage units in the first cluster relating to performance," and "using the received information to dynamically adjust the allocation of free space for storing incoming data in order to comply with defined system parameters including the need for free space to store recreated data in the event of a malfunction resulting in a loss of data," which is not claimed by Claims 62, 67, or 75. In addition, Claim 5 of U.S. Patent No. 7,146,524 claims "[a] virtual hot spare useful in the event of a loss of data," comprising, *inter alia*, "said storage allocation module is configured to locate

Application No.: 10/007,003
Filing Date: November 9, 2001

unallocated free space among said plurality of storage units,” “wherein said unallocated free space is open for use to write incoming protected data and to write said recreated data received from said failure recovery module” and “wherein said storage allocation module is further configured to estimate the amount of parity protected data that can be written to said unallocated free space so as to leave sufficient storage space in said unallocated free space for said recreated data,” which is not claimed by Claims 62, 67, or 75. Thus, Claims 62, 67, and 75 are patentably distinguishable from Claims 1 and 5 of U.S. Patent No. 7,146,524, and for this reason alone, the rejection should be withdrawn.

Second, Applicants do not understand the Office Action’s *general* basis for a nonstatutory obviousness-type double patenting rejection. This type of rejection is meant to “prevent prolongation of the patent term by prohibiting claims in a second patent not patentably distinguishing from claims in a first patent.” M.P.E.P. § 804. This Application was filed on November 9, 2001 and U.S. Patent No. 7,146,524 was filed on October 25, 2002. Thus, any claims that would issue from this Application would not “prolong the patent term” of U.S. Patent No. 7,146,524, a later filed application.

Third, Applicants do not understand the Office Action’s *specific* basis for a nonstatutory obviousness-type double patenting rejection. The Office Action states that “[t]he difference among these set of claims is merely in form of claim wording, wherein, the claims (i.e., 62, 67, and 75) of instant application direct to allocate metadata that identifies the location of data blocks for each file stored on the system, while the claims (i.e., 1 & 5) of ‘524 patent direct to claim allocate free storage space,” that “it is obvious for an ordinary skilled person in the art at the time the invention was made to fully aware that if there is no free space being allocated of the claimed storage system, then it is impossible to handle the distribution (or allocation) of metadata in the claimed storage system,” and that “by citing the broader claims (i.e., 62, 67, and 75) of the instant invention without the must (or common) details as recited in claims 1 and 5 of the 7,146,524 patent for the purpose to seek a broader coverage of his/hers invention of an optimizing storage system.” While Applicants do not agree that these statements are true, Applicants do not understand how these statements would even support a rejection based on nonstatutory obviousness-type double patenting.

Application No.: 10/007,003
Filing Date: November 9, 2001

Finally, the Office Action states that “there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent” and cites to *In re Schneller*, 397, F.2d 350 (1968). However, *Schneller* does not relate to a nonstatutory obviousness-type double patenting type rejection, see M.P.E.P. § 804 at 800-26, and thus, *Schneller* cannot be used to support the Office Action’s nonstatutory obviousness-type double patenting type rejection. In addition, “the type of double patenting rejection based on *In re Schneller* is rare and is limited to the particular facts of the case.” See M.P.E.P. § 804 at 800-26. The issue in *Schneller* dealt with two inventions with features ABCX and ABCY, which is not the issue raised by the Office Action. Applicants are not aware of, and the Office Action does not provide, any basis for applying *Schneller* to this Application.

Applicant has cancelled Claims 62 and 67 without prejudice or disclaimer. As such this rejection as to those claims is moot. However, for all of the above reasons, Applicants respectfully submit that the nonstatutory obviousness-type double patenting rejection for Claim 75 should be withdrawn.

B. Discussion of Rejection of Claim 74 under 35 U.S.C. 112

The Office Action rejected Claim 74 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully disagree with the Office Action’s rejection and respectfully traverse this rejection. However, Applicants have cancelled Claim 74 and thus the rejection under Section 112 is moot.

C. Discussion of Rejection of Claims 1-2, 7-10, 43 and 71-73 Under 35 U.S.C. § 102(e)

The Office Action rejected Claims 1-2, 7-10, 43 and 71-73 under 35 U.S.C. 102(e) as being anticipated by U.S. Publication No. 2003/0014391 to Evans et al. (“Evans”). Applicants respectfully disagree with the Office Action’s rejection and respectfully traverse this rejection because Evans fails to identically teach each and every element of Claims 1-2, 7-10, 43, and 71-73. See M.P.E.P. § 2131 (stating that in order to anticipate a claim, a prior art reference must identically teach every element of the claim). Moreover, Applicants respectfully submit that the claims as previously pending are patentably distinguished over Evans. Claims 1, 2, 7-8, and 43, however, have been amended in order to clarify the features of Applicants’ invention. These

Application No.: 10/007,003
Filing Date: November 9, 2001

claim amendments are not made for patentability purposes, and it is believed that the claims would satisfy the statutory requirements for patentability without the entry of such amendments. Applicants therefore respectfully submit that Claims 1-2, 7-10, 43, and 71-73 are patentably distinguished over Evans, and Applicants respectfully request allowance of Claims 1-2, 7-10, 43, and 71-73.

1. Claim 1

First, Applicants do not agree that Evans discloses a distributed file system that teaches the claimed features of Claim 1. Evans is not a distributed file system, but instead relates to multicast distribution of data to receivers, such as, for example, users that want to receive news articles for a particular sport.

As such, it is not surprising that Evans does not disclose all of the claimed features of Claim 1, such as, for example, the following: “a first file portion of the file comprising a first set of file data stored in the first storage unit,” “a second file portion of the file comprising a second set of file data stored in the second storage unit, wherein the second set of file data is different from the first set of file data,” “a first metadata to identify in part the location of the file, the first metadata stored on the first storage unit, the second storage unit, the third storage unit, and the fourth storage unit,” or “a second metadata, different at least in part from the first metadata, to supplement the first metadata in identifying the location of the file, the second metadata stored on at least one, but not all, of the first storage unit, the second storage unit, the third storage unit, and the fourth storage unit.”

The Office Action also cites to “Figure <<X>> and associated texts” for many of the claim elements, and does not provide any specific references to the text. In addition, the Office Action provides only citations and claim language and fails to provide any arguments showing how the claim language is allegedly disclosed in the citations. Thus, Applicants were unable to understand how the Evans reference was being applied to the claims of the Application.

Because Evans does not disclose the claimed features of Claim 1, Applicants respectfully submit that Claim 1 is patentably distinguished over Evans. Applicants respectfully request that the rejection of Claim 1 under U.S.C. § 102(e) be withdrawn that the Claim 1 is passed to allowance.

2. Claim 2

Claim 2 depends from Claim 1 and includes all of the limitations of Claim 1. Applicants respectfully submit that Evans fails to teach or suggest every element of Claim 1 and thus Evans fails to teach or suggest every element of Claim 2. In addition, Evans does not disclose "error correction data related to the file data, the error correction data stored in the distributed file storage system," nor does Evan disclose this feature in Paragraph 77, cited by the Office Action.

Thus, for the reasons discussed above with respect to Claim 1 and for the additional limitations therein, Applicants respectfully submit that Claim 2 is patentably distinguished over Evans. Applicants respectfully request that the rejection of Claim 2 under U.S.C. § 102(e) be withdrawn that the Claim 2 is passed to allowance.

3. Claim 7

Claim 7 depends from Claim 1 and includes all of the limitations of Claim 1. Applicants respectfully submit that Evans fails to teach or suggest every element of Claim 1 and thus Evans fails to teach or suggest every element of Claim 7. In addition, Evans does not disclose "the plurality of storage units comprising storage units configured to receive a request and to initiate the request to move the first file portion in real-time from the first storage unit to the third storage unit, and to send a request to update the second metadata to indicate the location of the moved first file portion," and in particular, Evans does not disclose this feature in Paragraphs 16-17, cited by the Office Action.

Thus, for the reasons discussed above with respect to Claim 1 and for the additional limitations therein, Applicants respectfully submit that Claim 7 is patentably distinguished over Evans. Applicants respectfully request that the rejection of Claim 7 under U.S.C. § 102(e) be withdrawn that the Claim 7 is passed to allowance.

4. Claim 8

Claim 8 depends from Claim 1 and includes all of the limitations of Claim 1. Applicants respectfully submit that Evans fails to teach or suggest every element of Claim 1 and thus Evans fails to teach or suggest every element of Claim 8. In addition, Evans does not disclose "the plurality of storage units comprising storage units configured to receive a request and to initiate the request to replicate the first file portion in real-time and to store the replicated first file portion on a different storage unit, and to send a request to update the second metadata to

Application No.: 10/007,003
Filing Date: November 9, 2001

indicate the location of the replicated first file portion,” and in particular, Evans does not disclose this feature in Paragraphs 22-23, cited by the Office Action.

Thus, for the reasons discussed above with respect to Claim 1 and for the additional limitations therein, Applicants respectfully submit that Claim 8 is patentably distinguished over Evans. Applicants respectfully request that the rejection of Claim 8 under U.S.C. § 102(e) be withdrawn that the Claim 8 is passed to allowance.

5. Claim 9

Claim 9 depends from Claim 1 and includes all of the limitations of Claim 1. Applicants respectfully submit that Evans fails to teach or suggest every element of Claim 1 and thus Evans fails to teach or suggest every element of Claim 9. In addition, Evans does not disclose “second metadata which includes metadata related to the locations in which the file data is stored,” and in particular, Evans does not disclose this feature in Paragraph 24, cited by the Office Action.

Thus, for the reasons discussed above with respect to Claim 1 and for the additional limitations therein, Applicants respectfully submit that Claim 9 is patentably distinguished over Evans. Applicants respectfully request that the rejection of Claim 9 under U.S.C. § 102(e) be withdrawn that the Claim 9 is passed to allowance.

6. Claim 10

Claim 10 depends from Claim 1 and includes all of the limitations of Claim 1. Applicants respectfully submit that Evans fails to teach or suggest every element of Claim 1 and thus Evans fails to teach or suggest every element of Claim 10. In addition, Evans does not disclose “second metadata which includes metadata related to a parent directory of the file,” and in particular, Evans does not disclose this feature in Paragraph 24, cited by the Office Action.

Thus, for the reasons discussed above with respect to Claim 1 and for the additional limitations therein, Applicants respectfully submit that Claim 10 is patentably distinguished over Evans. Applicants respectfully request that the rejection of Claim 10 under U.S.C. § 102(e) be withdrawn that the Claim 10 is passed to allowance.

7. Claim 43

Claim 43 depends from Claim 1 and includes all of the limitations of Claim 1. Applicants respectfully submit that Evans fails to teach or suggest every element of Claim 1 and thus Evans fails to teach or suggest every element of Claim 43. In addition, Evans does not

disclose “wherein the file has been stored on a number of the plurality of storage units, wherein the number is determined specifically for the file, and wherein the number is equal to or greater than two,” and in particular, Evans does not disclose this feature in Figure 1, cited by the Office Action. As set forth above, because the Office Action cites merely to “associated texts” and does not provide any specific references or arguments, Applicants were unable to understand how the Evans reference was being applied to Claim 43.

Thus, for the reasons discussed above with respect to Claim 1 and for the additional limitations therein, Applicants respectfully submit that Claim 43 is patentably distinguished over Evans. Applicants respectfully request that the rejection of Claim 43 under U.S.C. § 102(e) be withdrawn that the Claim 43 is passed to allowance.

8. Claim 71

Claim 71 depends from Claim 1 and includes all of the limitations of Claim 1. Applicants respectfully submit that Evans fails to teach or suggest every element of Claim 1 and thus Evans fails to teach or suggest every element of Claim 71. In addition, Evans does not disclose “wherein the first metadata identifies the location of the second metadata,” and in particular, Evans does not disclose this feature in Figures 4a-c, cited by the Office Action. As set forth above, because the Office Action cites merely to “associated texts” and does not provide any specific references or arguments, Applicants were unable to understand how the Evans reference was being applied to Claim 71.

Thus, for the reasons discussed above with respect to Claim 1 and for the additional limitations therein, Applicants respectfully submit that Claim 71 is patentably distinguished over Evans. Applicants respectfully request that the rejection of Claim 71 under U.S.C. § 102(e) be withdrawn that the Claim 71 is passed to allowance.

9. Claim 72

Claim 72 depends from Claim 1 and includes all of the limitations of Claim 1. Applicants respectfully submit that Evans fails to teach or suggest every element of Claim 1 and thus Evans fails to teach or suggest every element of Claim 72. In addition, Evans does not disclose “wherein the second metadata identifies the location of a third metadata, different at least in part from the first metadata and the second metadata, to supplement the first metadata and the second metadata in identifying the location of the file,” and in particular, Evans does not

Application No.: 10/007,003
Filing Date: November 9, 2001

disclose this feature in Figures 4a-c, cited by the Office Action. As set forth above, because the Office Action cites merely to “associated texts” and does not provide any specific references or arguments, Applicant also Applicants were unable to understand how the Evans reference was being applied to Claim 72.

Thus, for the reasons discussed above with respect to Claim 1 and for the additional limitations therein, Applicants respectfully submit that Claim 72 is patentably distinguished over Evans. Applicants respectfully request that the rejection of Claim 72 under U.S.C. § 102(e) be withdrawn that the Claim 72 is passed to allowance.

10. Claim 73

Claim 73 depends from Claim 1 and includes all of the limitations of Claim 1. Applicants respectfully submit that Evans fails to teach or suggest every element of Claim 1 and thus Evans fails to teach or suggest every element of Claim 73. In addition, Evans does not disclose “wherein the second metadata identifies the location of at least one of the following: the first set of file data and the second set of file data,” and in particular, Evans does not disclose this feature in Figures 4a-c, cited by the Office Action. As set forth above, because the Office Action cites merely to “associated texts” and does not provide any specific references or arguments, Applicants were unable to understand how the Evans reference was being applied to Claim 73.

Thus, for the reasons discussed above with respect to Claim 1 and for the additional limitations therein, Applicants respectfully submit that Claim 73 is patentably distinguished over Evans. Applicants respectfully request that the rejection of Claim 73 under U.S.C. § 102(e) be withdrawn that the Claim 73 is passed to allowance.

11. Summary

Thus, for the reasons set forth above, Applicants respectfully submit that Claims 1, 2, 7-10, 43, and 71-73 are in condition for allowance.

D. Discussion of Rejection of Claims 3-6 and 11-12 Under 35 U.S.C. § 103(a)

The Office Action rejected Claims 3-6 and 11-12 under 35 U.S.C. 103(a) as being unpatentable over Evans in view of U.S. Patent No. 5,884,098 to Mason, Jr. (“Mason”). Applicants respectfully disagree with the Office Action’s rejection and respectfully traverse this rejection because Evans, alone or in combination with Mason, fails to teach each and every element of Claims 3-6 and 11-12. Moreover, Applicants respectfully submit that the claims as

Application No.: 10/007,003
Filing Date: November 9, 2001

previously pending are patentably distinguished over Evans and Mason. Claims 5-6, however, have been amended in order to clarify the features of Applicants' invention. These claim amendments are not made for patentability purposes, and it is believed that the claims would satisfy the statutory requirements for patentability without the entry of such amendments. Applicants therefore respectfully submit that Claims 3-6 and 11-12 are patentably distinguished over Evans, and Applicants respectfully request allowance of Claims 3-6 and 11-12.

1. Claim 3

Claim 3 depends from Claim 2 and includes all of the limitations of Claim 2. Applicants respectfully submit that Evans fails to teach or suggest every element of Claim 2 and thus Evans fails to teach or suggest every element of Claim 3. Thus, for the reasons discussed above with respect to Claim 2, Applicants respectfully submit that Claim 3 is patentably distinguished over Evans, alone or in combination with Mason. Applicants respectfully request that the rejection of Claim 3 under U.S.C. § 102(e) be withdrawn that the Claim 3 is passed to allowance.

2. Claim 4

Claim 4 depends from Claim 3 and includes all of the limitations of Claim 3. Applicants respectfully submit that Evans fails to teach or suggest every element of Claim 3 and thus Evans fails to teach or suggest every element of Claim 4. In addition, Mason and Evans do not disclose "location information indicating where the parity data blocks are stored," and in particular, Mason does not disclose this feature in Col. 1, lines 36-65, cited by the Office Action.

Thus, for the reasons discussed above with respect to Claim 3 and for the additional limitations therein, Applicants respectfully submit that Claim 4 is patentably distinguished over Evans, alone or in combination with Mason. Applicants respectfully request that the rejection of Claim 4 under U.S.C. § 102(e) be withdrawn that the Claim 4 is passed to allowance.

3. Claim 5

Claim 5 depends from Claim 2 and includes all of the limitations of Claim 2. Applicants respectfully submit that Evans fails to teach or suggest every element of Claim 2 and thus Evans fails to teach or suggest every element of Claim 5. In addition, Mason and Evans do not disclose "the second metadata which further indicates the location of the redundancy data," and in particular, Mason does not disclose this feature in Col. 1, lines 18-65, cited by the Office Action.

Thus, for the reasons discussed above with respect to Claim 2 and for the additional limitations therein, Applicants respectfully submit that Claim 5 is patentably distinguished over Evans, alone or in combination with Mason. Applicants respectfully request that the rejection of Claim 5 under U.S.C. § 102(e) be withdrawn that the Claim 5 is passed to allowance.

4. Claim 6

Claim 6 depends from Claim 1 and includes all of the limitations of Claim 1. Applicants respectfully submit that Evans fails to teach or suggest every element of Claim 1 and thus Evans fails to teach or suggest every element of Claim 6. In addition, Mason and Evans do not disclose “first metadata which includes metadata related to the root directory,” and in particular, Evans does not disclose this feature in Paragraph 24, cited by the Office Action.

Thus, for the reasons discussed above with respect to Claim 1 and for the additional limitations therein, Applicants respectfully submit that Claim 6 is patentably distinguished over Evans, alone or in combination with Mason. Applicants respectfully request that the rejection of Claim 6 under U.S.C. § 102(e) be withdrawn that the Claim 6 is passed to allowance.

5. Claim 10

Claim 10 depends from Claim 1 and includes all of the limitations of Claim 1. Applicants respectfully submit that Evans fails to teach or suggest every element of Claim 1 and thus Evans fails to teach or suggest every element of Claim 5. In addition, Mason and Evans do not disclose “second metadata which includes metadata related to a parent directory of a file,” and in particular, Mason does not disclose this feature in Col. 2, lines 11-40, cited by the Office Action.

Thus, for the reasons discussed above with respect to Claim 1 and for the additional limitations therein, Applicants respectfully submit that Claim 10 is patentably distinguished over Evans, alone or in combination with Mason. Applicants respectfully request that the rejection of Claim 10 under U.S.C. § 102(e) be withdrawn that the Claim 10 is passed to allowance.

6. Claim 11

Claim 11 depends from Claim 1 and includes all of the limitations of Claim 1. Applicants respectfully submit that Evans fails to teach or suggest every element of Claim 1 and thus Evans fails to teach or suggest every element of Claim 11. In addition, Mason and Evans do

Application No.: 10/007,003
Filing Date: November 9, 2001

not disclose “configured to handle more READ requests than WRITE requests,” and in particular, Mason does not disclose this feature in Col. 2, lines 11-40, cited by the Office Action.

Thus, for the reasons discussed above with respect to Claim 1 and for the additional limitations therein, Applicants respectfully submit that Claim 11 is patentably distinguished over Evans, alone or in combination with Mason. Applicants respectfully request that the rejection of Claim 11 under U.S.C. § 102(e) be withdrawn that the Claim 11 is passed to allowance.

7. Evidence of Secondary Considerations

Applicants also note that the Office Action failed to address the evidence of secondary considerations demonstrating nonobviousness as presented in Applicants’ previous Amendment/Response dated July 19, 2007.

8. Summary

Thus, for the reasons set forth above, Applicants respectfully submit that Claims 3-6 and 11-12 are in condition for allowance.

E. Discussion of Rejection of Claims 62, 67, and 74-75 Under 35 U.S.C. § 102(b)

The Office Action rejected Claims 62, 67, and 74-75 under 35 U.S.C. § 102(b) as being anticipated by Mason. Applicants respectfully disagree with the Office Action’s rejection and respectfully traverse this rejection because Mason fails to identically teach each and every element of Claims 62, 67, 74-75. *See* M.P.E.P. § 2131 (stating that in order to anticipate a claim, a prior art reference must identically teach every element of the claim). With respect to Claims 62, 67, and 74, the issue is moot, however, because Applicant has cancelled these claims without prejudice or disclaimer.

With respect to Claim 75, Applicants respectfully submit that Claim 75 as previously pending is patentably distinguished over Mason. Claim 75, however, has been amended in order to clarify the features of Applicants’ invention. These claim amendments are not made for patentability purposes, and it is believed that the claims would satisfy the statutory requirements for patentability without the entry of such amendments. Applicants therefore respectfully submit that Claim 75 is patentably distinguished over Mason, and Applicants respectfully request allowance of Claim 75.

1. Claim 75

Applicants do not agree that Mason discloses a distributed file system that teaches the claimed features of Claim 75. Mason is not a distributed file system, but instead relates to “the caching of data and meta-data in controllers implementing the RAID Level 5 architecture.” *Mason*, Col. 1, Lines 13–14. Mason does not disclose the claimed features of Claim 75 including: “multiple storage units configured to communicate with each other, each comprising a storage device, a processor, and executable software stored on the storage device, the executable software configured to process file read and write requests on behalf of the storage system,” or “location metadata necessary to identify the location of a plurality of files stored on the storage system, wherein the location metadata is distributed across a subset of the multiple storage units, each storage unit in the subset storing a portion of the location metadata that is different at least in part from portions stored on other storage units in the subset.”

The Office Action again cites to “associated texts” for one of the claim elements, and does not provide any specific references to the text. In addition, the Office Action provides only citations and claim language and fails to provide any arguments showing how the claim language is allegedly disclosed in the citations. Thus, Applicants were unable to understand how Mason was being applied to the claims of the Application.

Because Mason does not disclose the claimed features of Claim 75, Applicants respectfully submit that Claim 75 is patentably distinguished over Mason. Applicants respectfully request that the rejection of Claim 75 under U.S.C. § 102(e) be withdrawn that the Claim 75 is passed to allowance.

F. Discussion of Rejection of Claims 63-66 and 68-70 Under 35 U.S.C. § 103(a)

The Examiner rejected Claims 63-66 and 68-70 under 35 U.S.C. § 103(a) as being unpatentable over Mason in view of Evans. Claims 63-66 depend from, and include all of the limitations of, independent Claim 62; Claims 68-70 depend from, and include all of the limitations of, independent Claim 67. As set forth above, Applicants respectfully submit that Mason fails to teach or suggest every element of Claims 61 and 67. In addition, Applicants submit that Mason, alone or in combination with Evans, fails to teach or suggest every element of Claims 63-66 and 68-70. Thus, for the reasons discussed above with respect to Claims 63 and

Application No.: 10/007,003
Filing Date: November 9, 2001

67, and for the additional limitations therein, Applicants respectfully submit that Claims 63-66 and 68-70 are patentably distinguished over Mason, alone or in combination with Evans.

As described above, Mason does not anticipate Claims 62 and 67. Although Applicant does not agree that Claims 63-66 and 68-70 are unpatentable over Mason alone or in combination with Evans, Applicant has cancelled these claims and thus the rejection under 35 U.S.C. § 103(a) is moot.

G. New Claims

New claims 76-98 have been added and are believed to be fully distinguished over the prior art of record. No new matter is added by these claims.

Claims 75-83 depend from Claim 75 and are believed to be allowable for the same reasons articulated above with respect to Claim 75, and because of the additional features recited therein.

Claims 84-97 have been added and are believed to be allowable. Moreover, Applicants respectfully submit that Evans, alone or in combination with Mason, fail to teach or suggest every element of any of Claims 84-97, and thus, Claims 84-97 are believed to be allowable.

Claim 98 depends from Claim 1 and is believed to be allowable for the same reasons articulated above with respect to Claim 1, and because of the additional features recited therein.

H. No Disclaimers or Disavowals

Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, the Applicants are not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. The Applicants reserve the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that the Applicants have made any disclaimers or disavowals of any subject matter supported by the present application.

Application No.: 10/007,003
Filing Date: November 9, 2001

I. Co-Pending Applications of Assignee

Applicant wishes to draw the Examiner's attention to the following co-pending applications of the present application's assignee. Applicant has previously submitted Office Actions and/or other references related to the prosecution of these applications, and Applicant cordially invites the Examiner to review these previous submissions and other relevant file history regarding these applications.

Serial Number	Title	Filed
10/714,326	SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	11/14/03
11/880,462	SYSTEMS AND METHODS FOR PROVIDING A DISTRIBUTED FILE SYSTEM UTILIZING METADTA TO TRACK INFORMATION ABOUT DATA STORED THROUGHOUT THE SYSTEM	07/19/07
11/503,318	SYSTEMS AND METHODS FOR A DISTRIBUTED FILE SYSTEM WITH DATA RECOVERY	08/11/2006

In connection with the aforementioned, Applicant further notes that the above-listed co-pending applications and issued patents owned by Applicant may recite subject matter similar to the claims of the present application. Applicant requests the Examiner to consider the following Office Actions and associated responses by Applicant in each of the following cases when determining the patentability of the pending claims of the present application. While Applicant does not believe it necessary to individually list every Patent Office communication, along with Applicant's associated response, for cases with related subject matter, Applicant has attempted to do so as a courtesy and requests that the Examiner continue to monitor these applications.

Appl. No./ Patent No.	Attorney Docket No.	Document	Date
10/281,467	ISIL.001CP2	Non-Final Rejection	05/18/2004
10/281,467	ISIL.001CP2	Response after Non-Final Action	06/09/2004
10/281,467	ISIL.001CP2	Non-Final Rejection	08/30/2004
10/281,467	ISIL.001CP2	Response after Non-Final Action	11/30/2004
10/281,467	ISIL.001CP2	Non-Final Rejection	01/28/2005
10/281,467	ISIL.001CP2	Response after Non-Final Action	03/28/2005
10/281,467	ISIL.001CP2	Advisory Action	04/11/2005

Application No.: 10/007,003
Filing Date: November 9, 2001

Appl. No./ Patent No.	Attorney Docket No.	Document	Date
10/281,467	ISIL.001CP2	Response to Advisory Action	04/28/2005
10/281,467	ISIL.001CP2	Non-Final Rejection	06/13/2005
10/281,467	ISIL.001CP2	Response after Non-Final Action	12/13/2005
10/281,467	ISIL.001CP2	Non-Final Rejection	02/14/2006
10/281,467	ISIL.001CP2	Response after Non-Final Action	04/13/2006
10/281,467	ISIL.001CP2	Notice of Allowance	07/19/2006
10/714,326	ISIL.002A	Non-Final Rejection	08/14/2006
10/714,326	ISIL.002A	Response after Non-Final Action	11/14/2006
10/714,326	ISIL.002A	Non-Final Rejection	02/08/2007
10/714,326	ISIL.002A	Response after Non-Final Action	05/04/2007
10/714,326	ISIL.002A	Non-Final Rejection	06/15/2007
10/714,326	ISIL.002A	Response after Non-Final Action	09/17/2007
10/714,326	ISIL.002A	Final Rejection	12/06/2007
11/503,318	ISIL.1CP2C1	Non-Final Rejection	08/09/2007

Applicant notes that cited references, office actions, responses and/or notices of allowance currently exist or will exist for the above-referenced matters. Applicant also understands that the Examiner has access to sophisticated online US Patent and Trademark Office computing systems that provide ready access to, for example, specification and drawing publications, pending claims and complete file histories, including, for example, cited art, Office Actions, responses, and notices of allowance. Thus, Applicant respectfully requests that the Examiner review these file histories. However, if the Examiner cannot readily access these file histories, Applicant would be pleased to provide any portion of any of the file histories at any time upon request.

J. Summary

In view of the foregoing comments, it is respectfully submitted that the present Application is fully in condition for allowance, and such action is earnestly solicited. If any

Application No.: 10/007,003
Filing Date: November 9, 2001

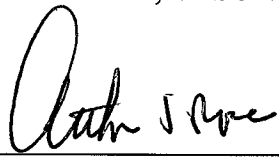
questions remain, however, the Examiner is cordially invited to contact the undersigned attorney so that any such matters may be promptly resolved.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 4/14/2008

By: 

Arthur S. Rose
Registration No. 28,038
Attorney of Record
Customer No. 20,995
(949) 760-0404

5139741

EXHIBIT 1

Knobbe Martens Olson & Bear LLP

App. No. 10/007,003 (Patel, et al.)

Filed Nov. 9, 2001

**SYSTEMS AND METHODS FOR PROVIDING A
DISTRIBUTED FILE SYSTEM UTILIZING METADATA
TO TRACK INFORMATION ABOUT DATA STORED
THROUGHOUT THE SYSTEM**

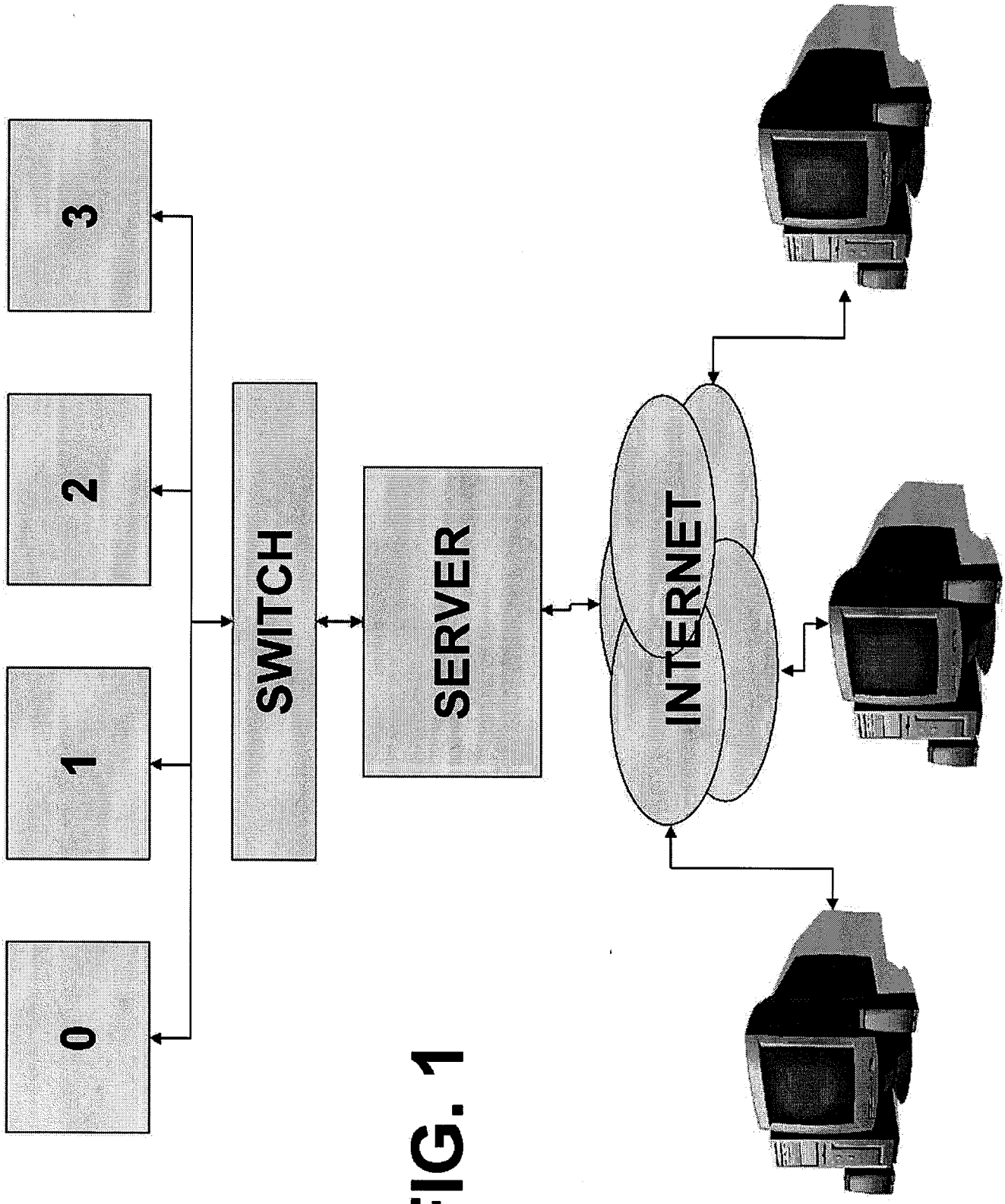


FIG. 1

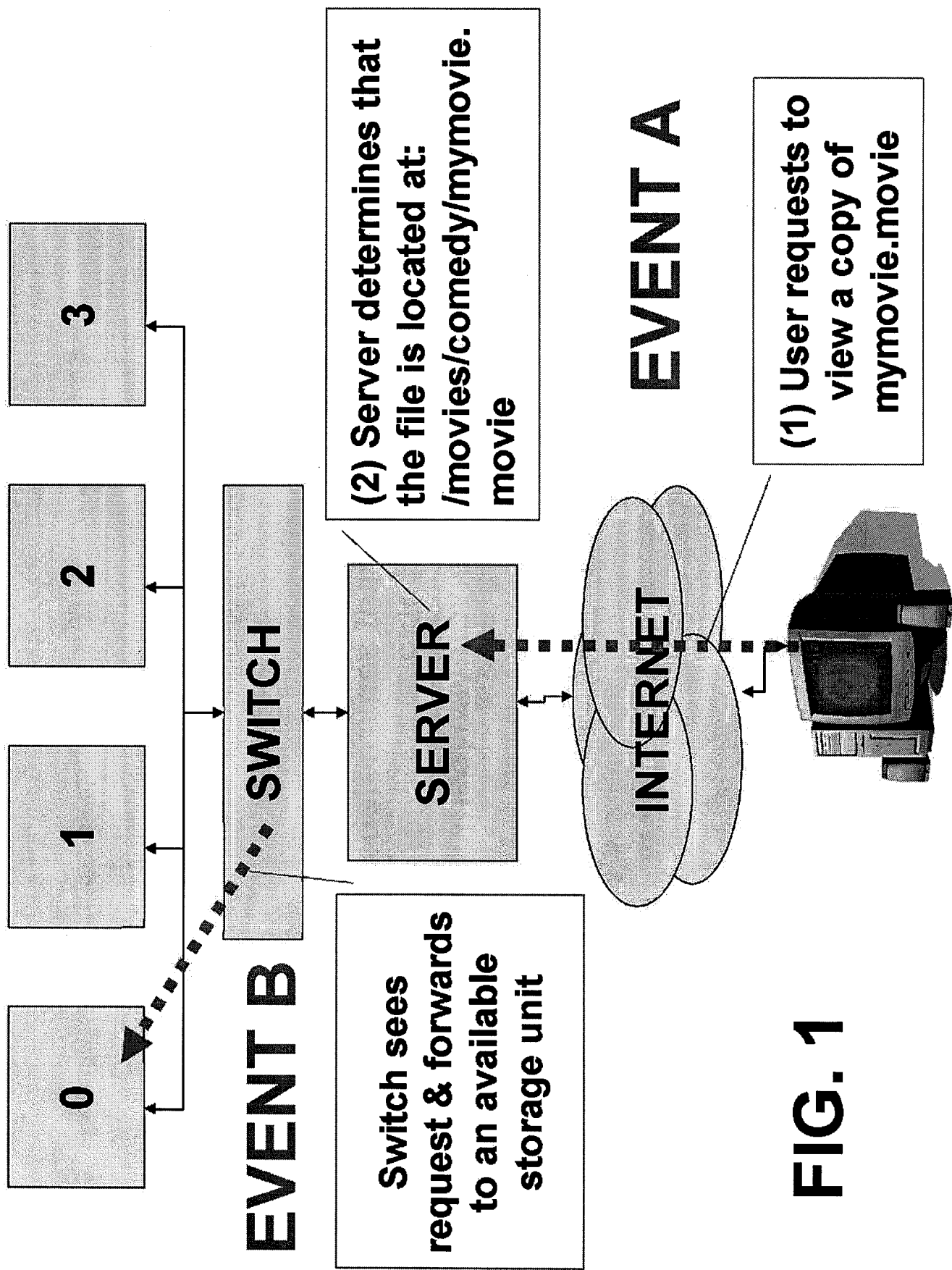
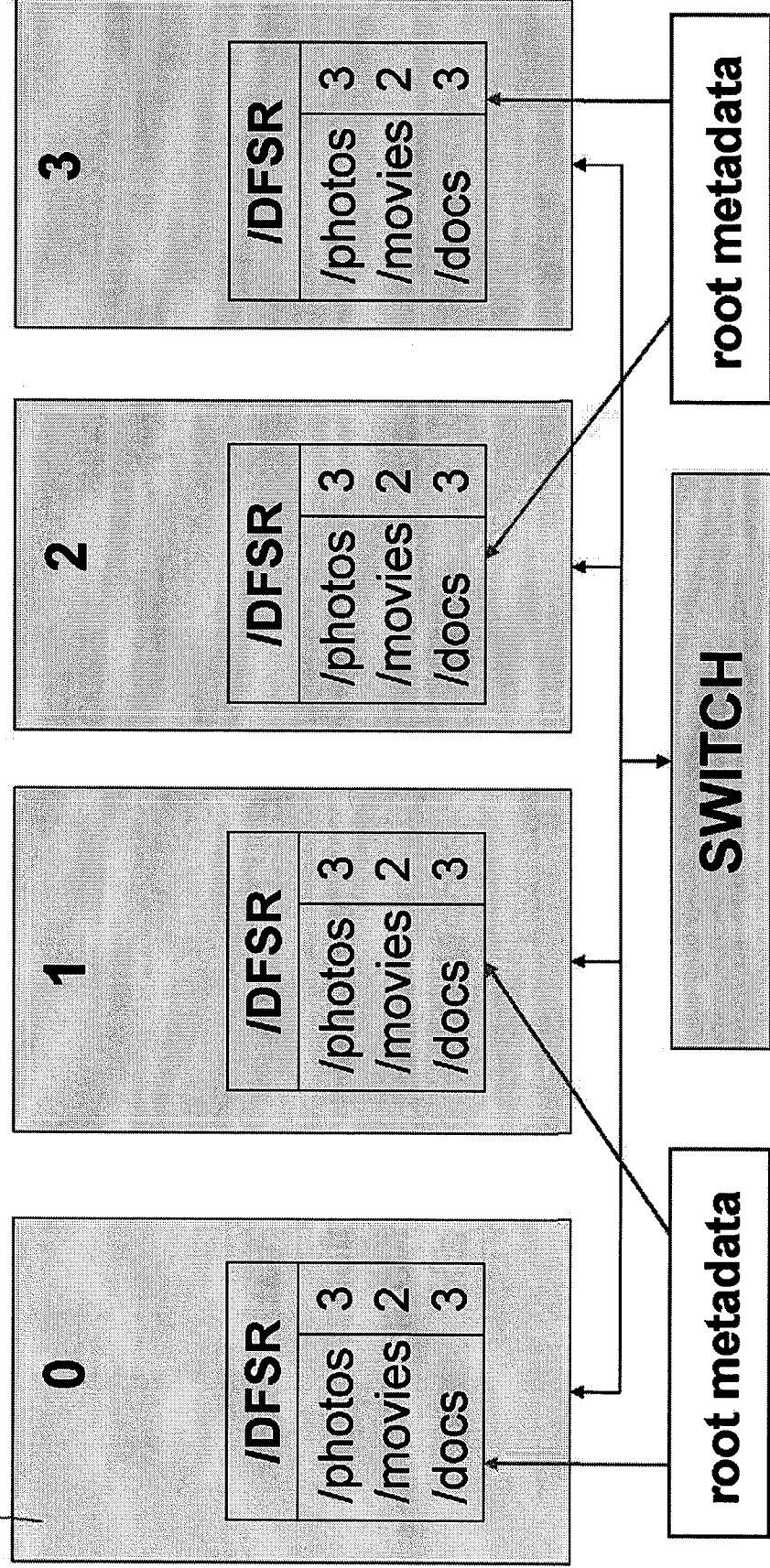


FIG. 1

EVENT C

“a first metadata to identify in part the location of the file, the first metadata stored on the first storage module, the second storage module, the third storage module, and the fourth storage module”

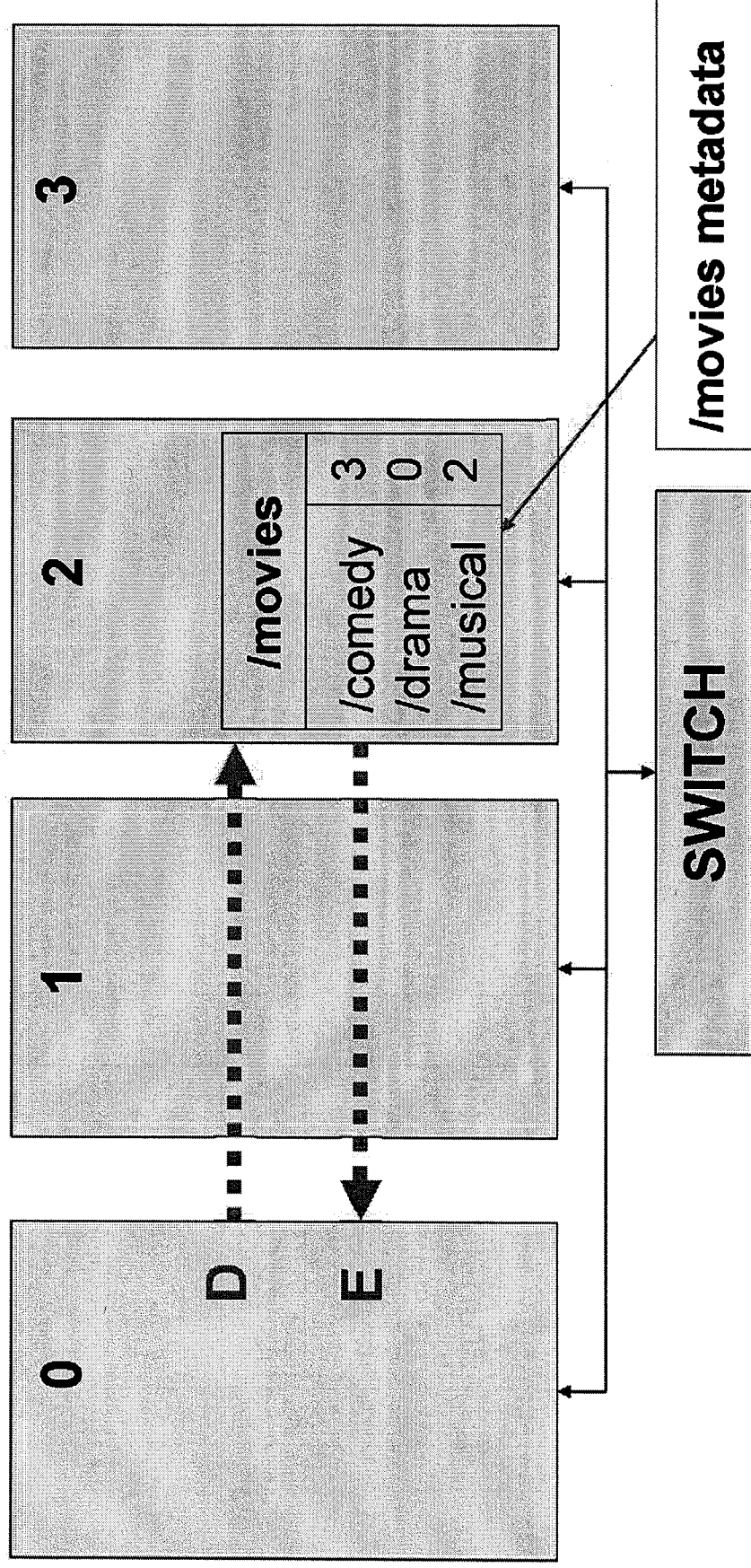
Storage unit 0
determines that
metadata for /movies is
stored on storage unit 2



EVENTS

D&E

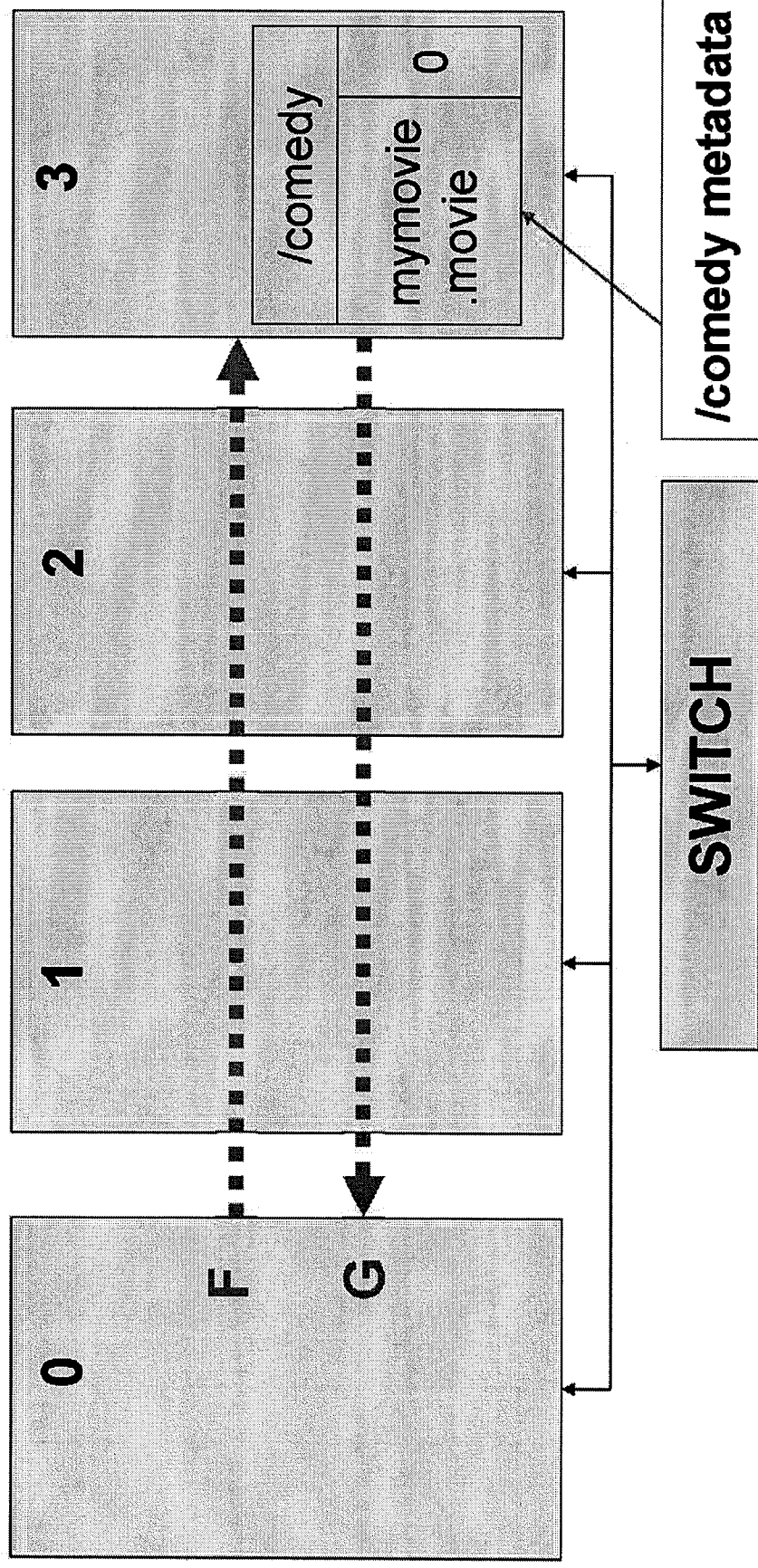
“a second metadata, different at least in part from the first metadata, to supplement the first metadata in identifying the location of the file, the second metadata stored on at least one, but not all, of the first storage module, the second storage module, the third storage module, and the fourth storage module”



EVENTS

F&G

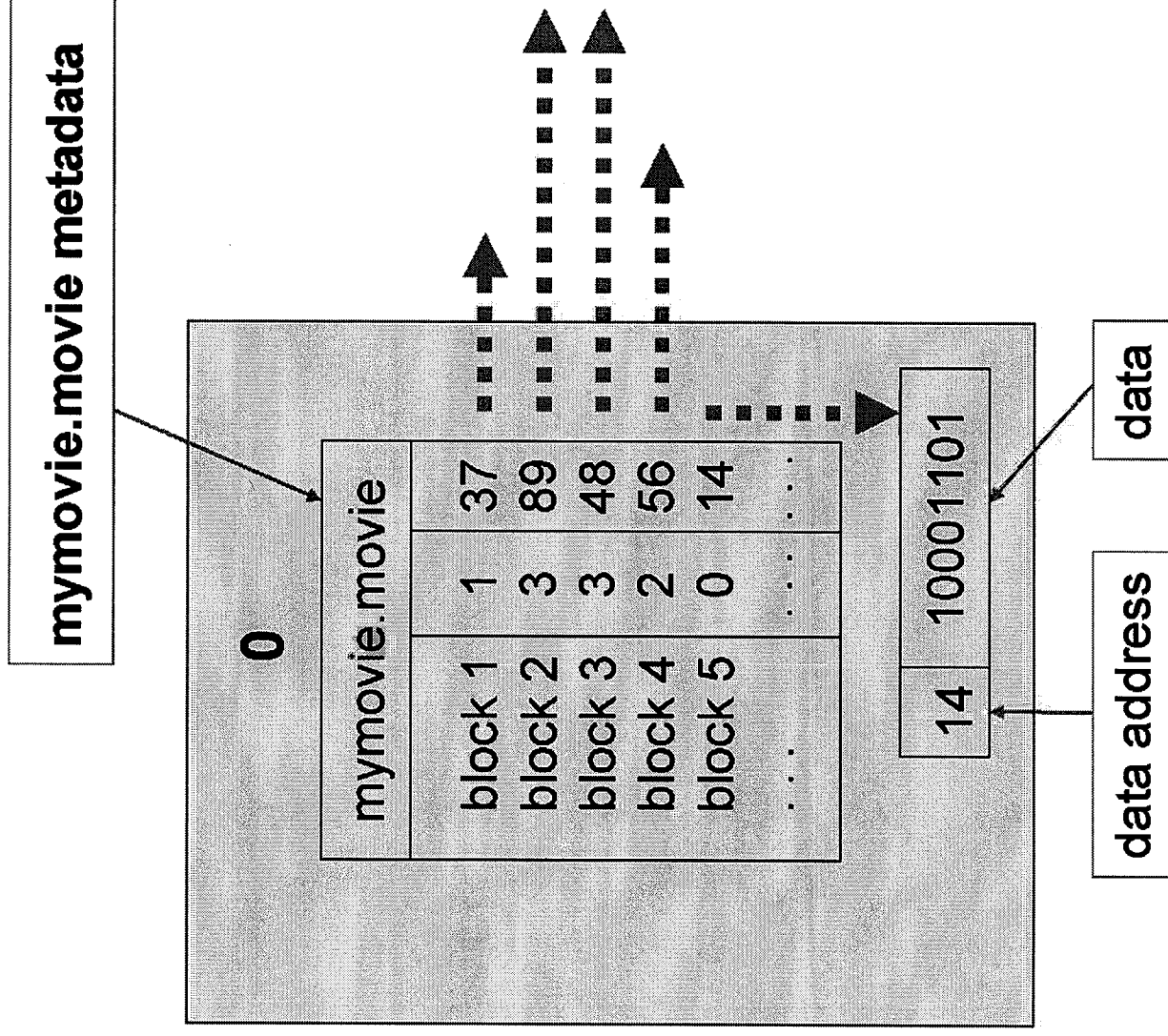
“a second metadata, different at least in part from the first metadata, to supplement the first metadata in identifying the location of the file, the second metadata stored on at least one, but not all, of the first storage module, the second storage module, the third storage module, and the fourth storage module”



EVENT H

“a first file portion of the file comprising a first set of file data stored in the first storage module”

“a second file portion of the file comprising a second set of file data stored in the second storage module, wherein the second set of file is different from the first set of file data”





Knobbe Martens Olson & Bear LLP

***2040 Main Street, Fourteenth Floor, Irvine, CA 92614
Tel 949.760.0404 • Fax 949.760.9502 • kmob.com***

550 West C Street, Suite 1200, San Diego, CA 92101

One Sansome Street, Suite 3500, San Francisco, CA 94104

1901 Avenue of the Stars, Suite 1500, Los Angeles, CA 90067

3403 Tenth Street, Suite 700, Riverside, CA 92501

1114 Marsh Street, San Luis Obispo, CA 93401

***Intellectual Property Law
Down to a Science***

EXHIBIT 2



*Isilon Systems Overview
(Long Version – General)*

How breakthroughs begin.™

Agenda

- Introductions
- Clustered Storage Overview
- Isilon's Products & Technologies
- Unique Advantages & Business Value
- Product Demonstration
- Discussion of Next Steps

Isilon Clustered Storage Systems and Software

SmartQuotas[™]

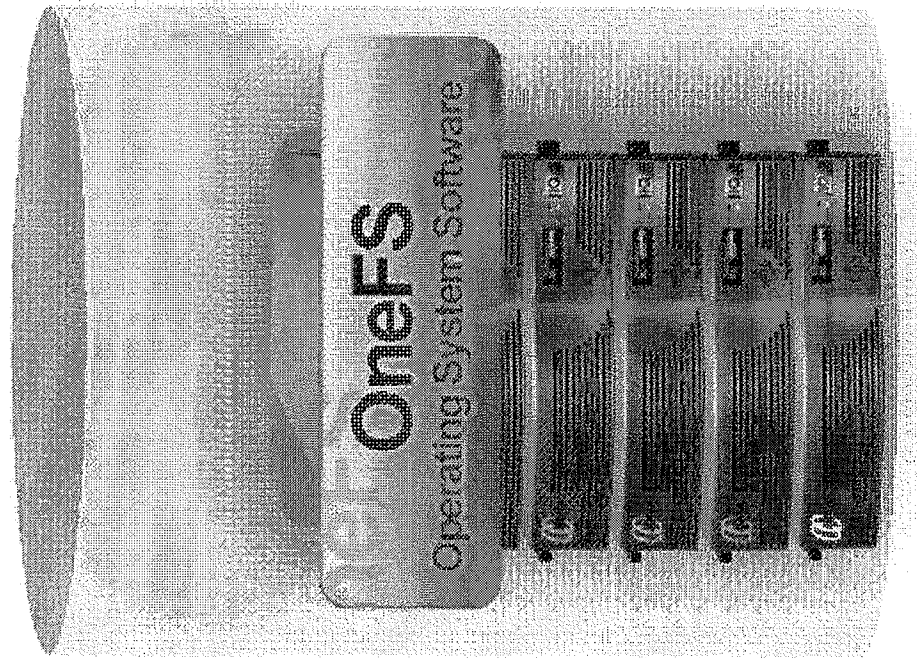
MigrationIQ[™]

SmartConnect[™]

Aspera for
Isilon IQ[™]

SnapshotIQ[™]

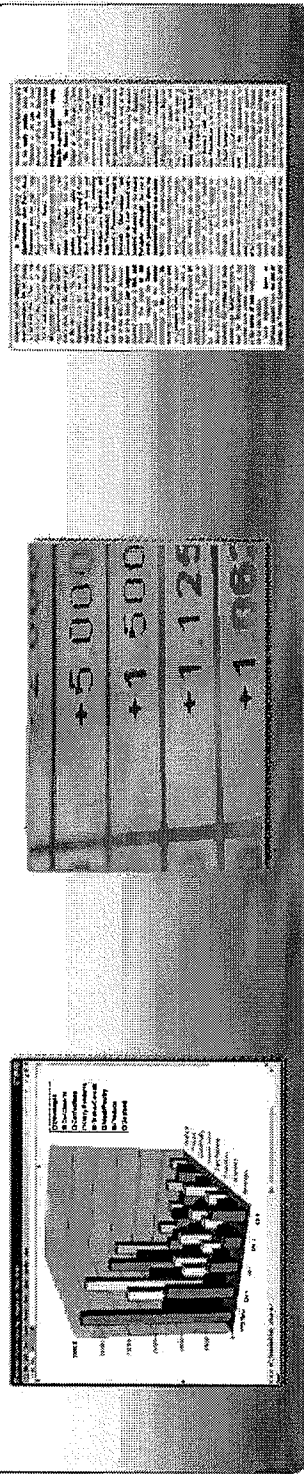
SyncIQ[™]



Traditional NAS & SAN Systems Were Designed for...

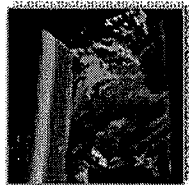
Structured Block and File Data

- Databases (Oracle, SQL, Exchange)
- Text, character strings
- Many small files, modest-sized stores
- Random access write/read
- Transactional, I/O intensive
- Steady, predictable growth

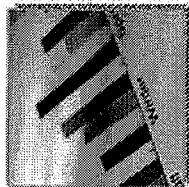


Isilon Clustered Storage Was Designed For...

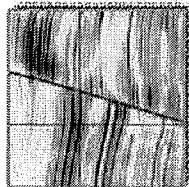
Unstructured Data



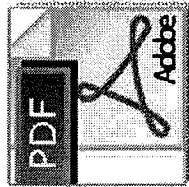
Computer
Modeling



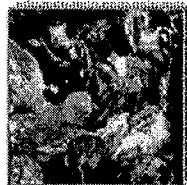
Research
Analysis



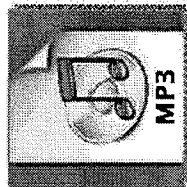
Seismic
Data



PDFs



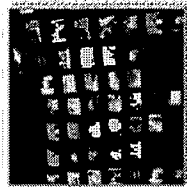
Satellite
Photos



Music/Audio



Business
Records



Video and
Graphics

Characterized by:

- Explosive, Unpredictable Growth
- Throughput Intensive
- Concurrent Write/Read Access

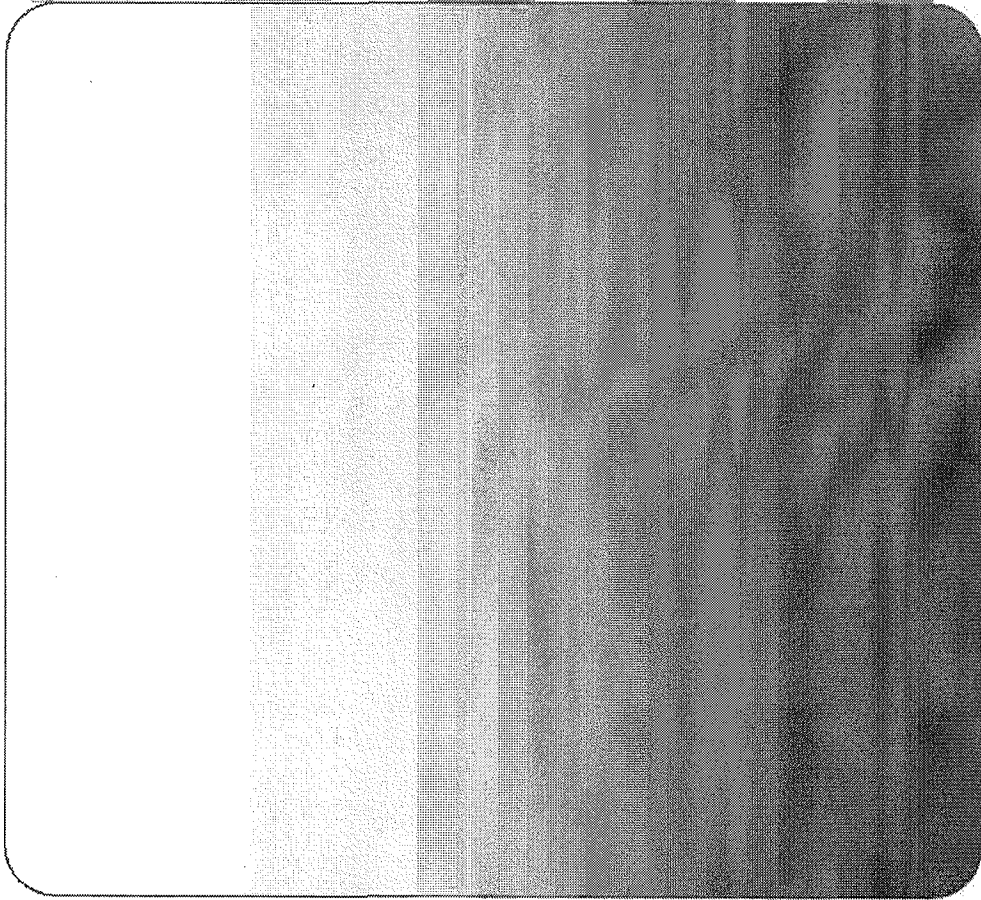
Isilon: The Right Tool for the Right Job

How Is Isilon Clustered Storage Used?

- Clustered Computing Environments
- Archiving & Tiered Storage
- Disaster Recovery & Disk-to-Disk Backup
- Content Creation & Production
- WAN File Sharing & Content Delivery
- E-Discovery & Document Management
- Scalable File Services



Who is Using Isilon Clustered Storage...and Why?



- Reduces storage costs

- Increases IT operating leverage

- Speeds workflows

- Unlocks New Revenues

- Complementary

Isilon's Clustered Storage Solution

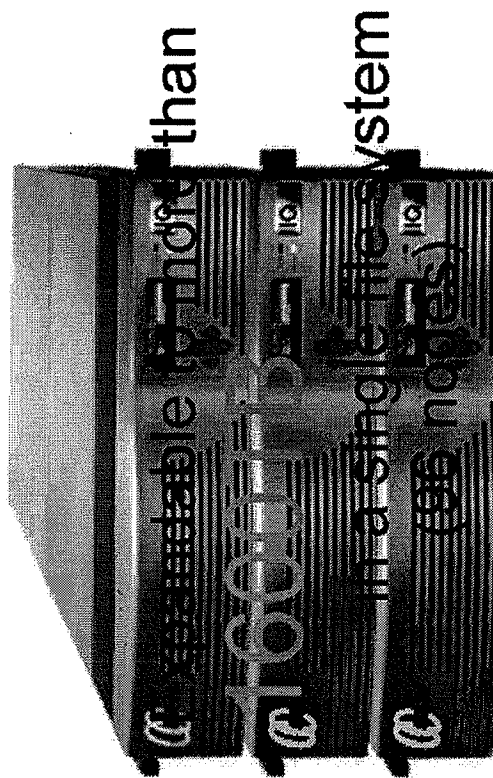
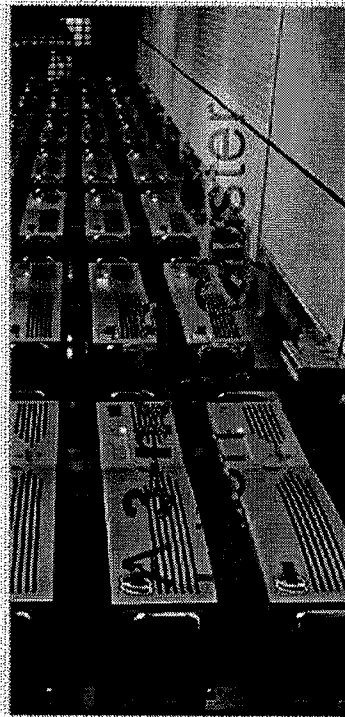
OneFS™
intelligent
software



Enterprise-
class
hardware



Isilon IQ
Complete
storage system



Clustered Storage is Made Up Of "Nodes"

OneFS™ Distributed File System

Modular, self-contained nodes each include:

- Standard GigE for front-end network
- High-performance, low-latency InfiniBand for back-end network
- Dual core Intel processor
- 4 GB memory read cache/0.5 GB NVRAM
- Hot-swappable disks, power supplies, and fans

Industry standard protocols

- NFS, CIFS, HTTP, FTP, NDMP, SNMP
- ADS, LDAP and NIS for security



Highly Scalable Product Family

Performance



Isilon IQ 1920, 3000, 6000,
9000 or 12000 + IQ Accelerator

**Independent
Performance Scalability**



Isilon IQ 1920, 3000, 6000, 9000 and 12000
Platform Nodes



Isilon IQ 200 Platform Node

**Linear Performance and
Capacity Scaling**



Isilon IQ 6000/9000/12000
+ EX 6000/9000/12000

**Independent
Capacity Scalability**

Capacity

Core Value: OneFS™ Operating System

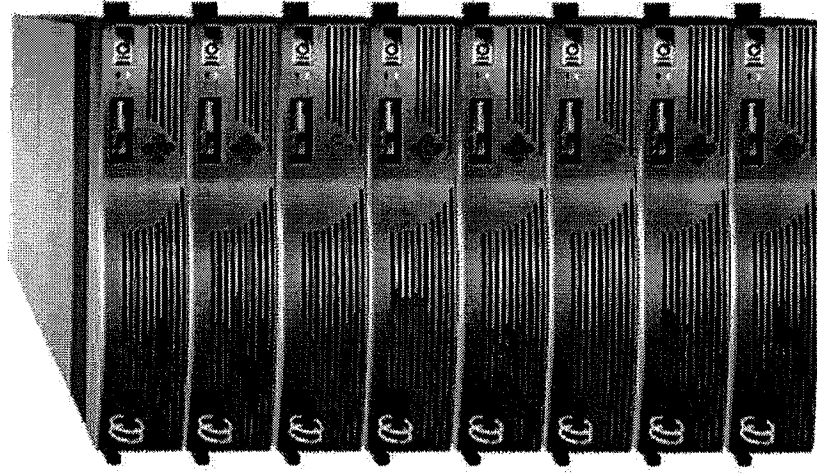


- Creates one giant "z." drive
- Highest performance, fully symmetric cluster
- Easy to manage and grow
- Single unified platform across all products

"Isilon's value is in its software, starting with its OneFS distributed file system that now scales to a petabyte with up to 10 GB/sec performance, all within a single, logical storage system that is easy to manage. Isilon epitomizes next generation storage."

Tony Asaro, senior analyst, Enterprise Strategy Group

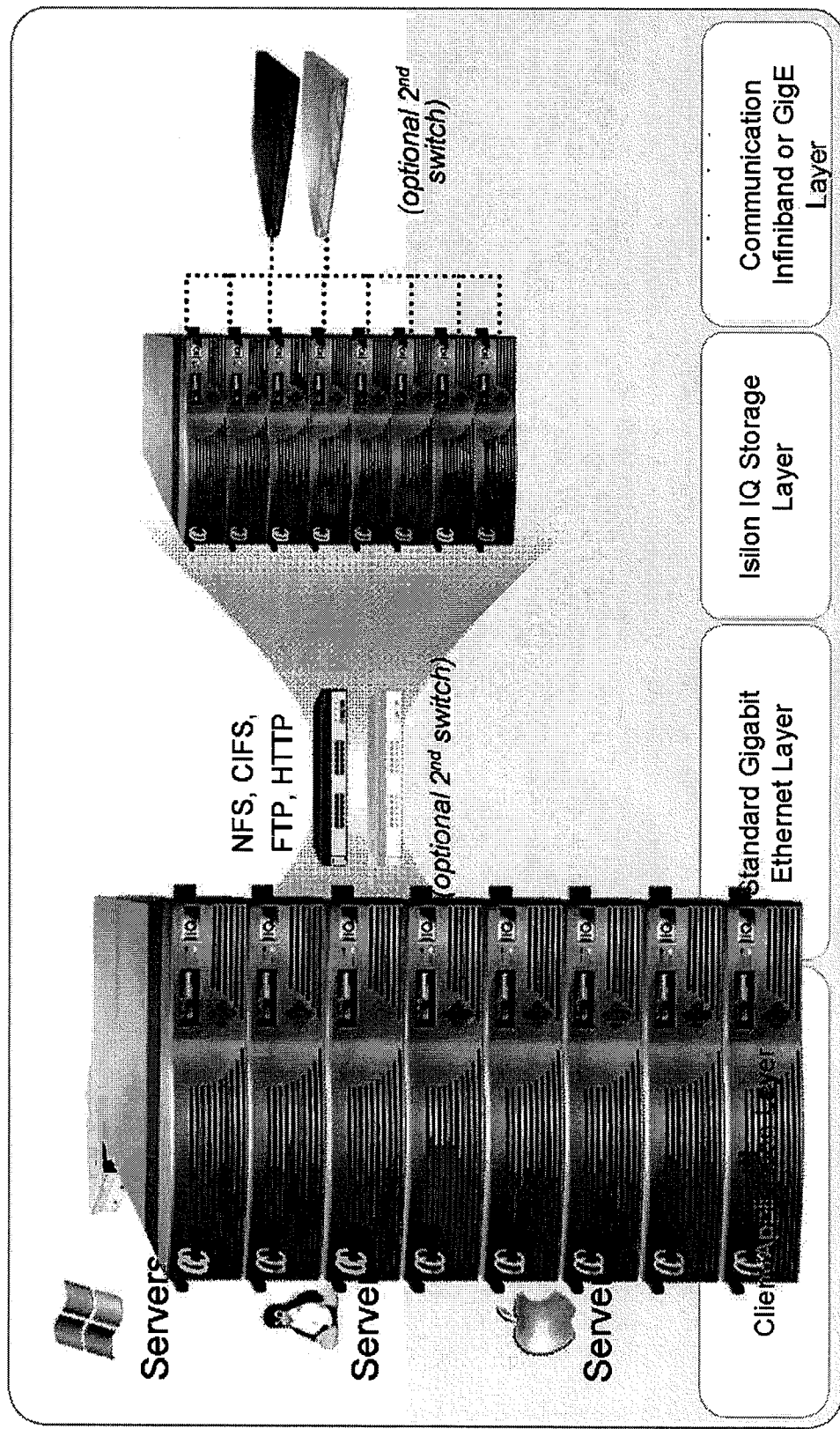
OneFS Unique Cluster File Striping



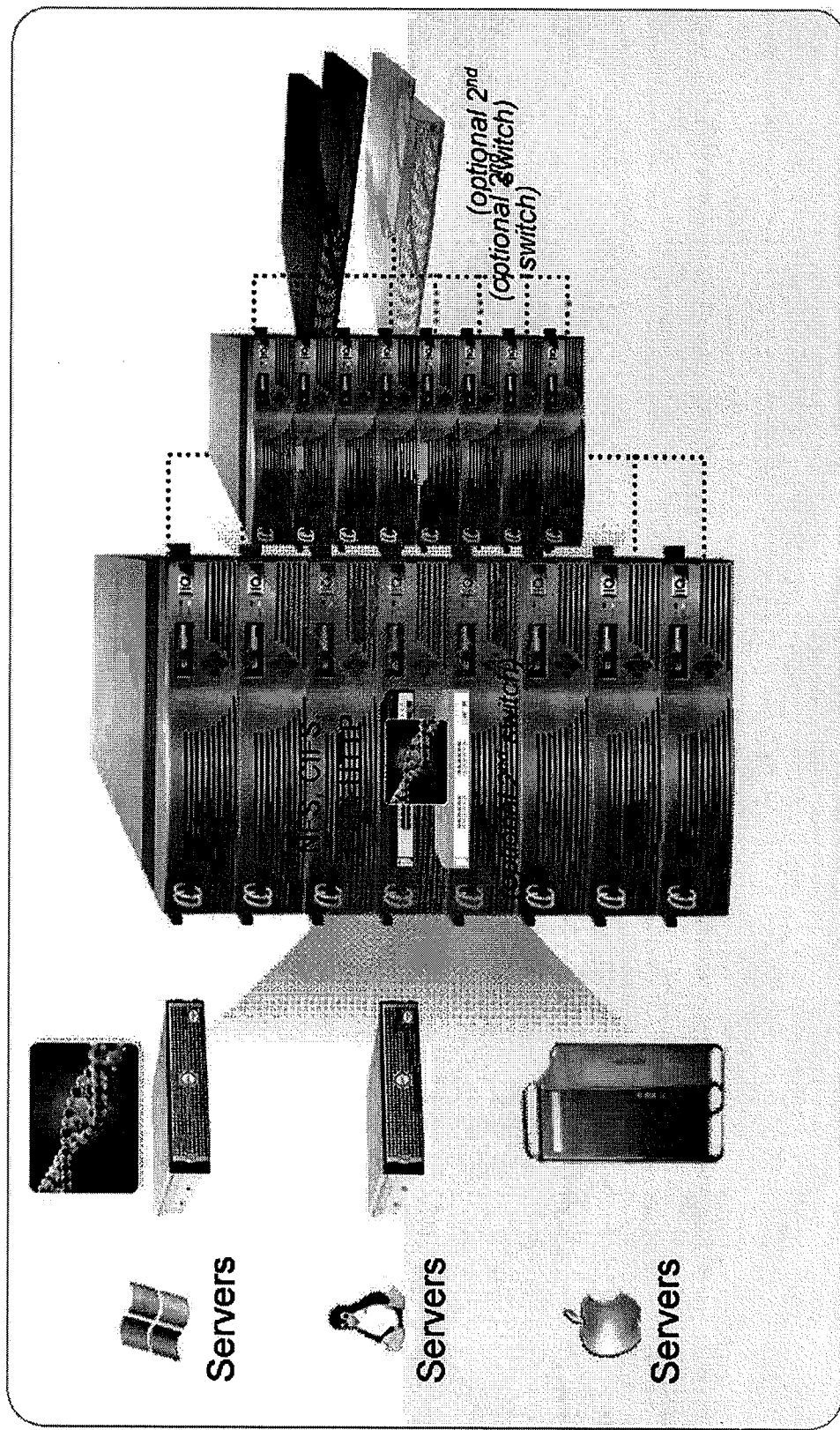
Cornerstone for a truly symmetric clustered architecture

- High performance
- Linear scalability
- Unmatched reliability
- Ease of Use

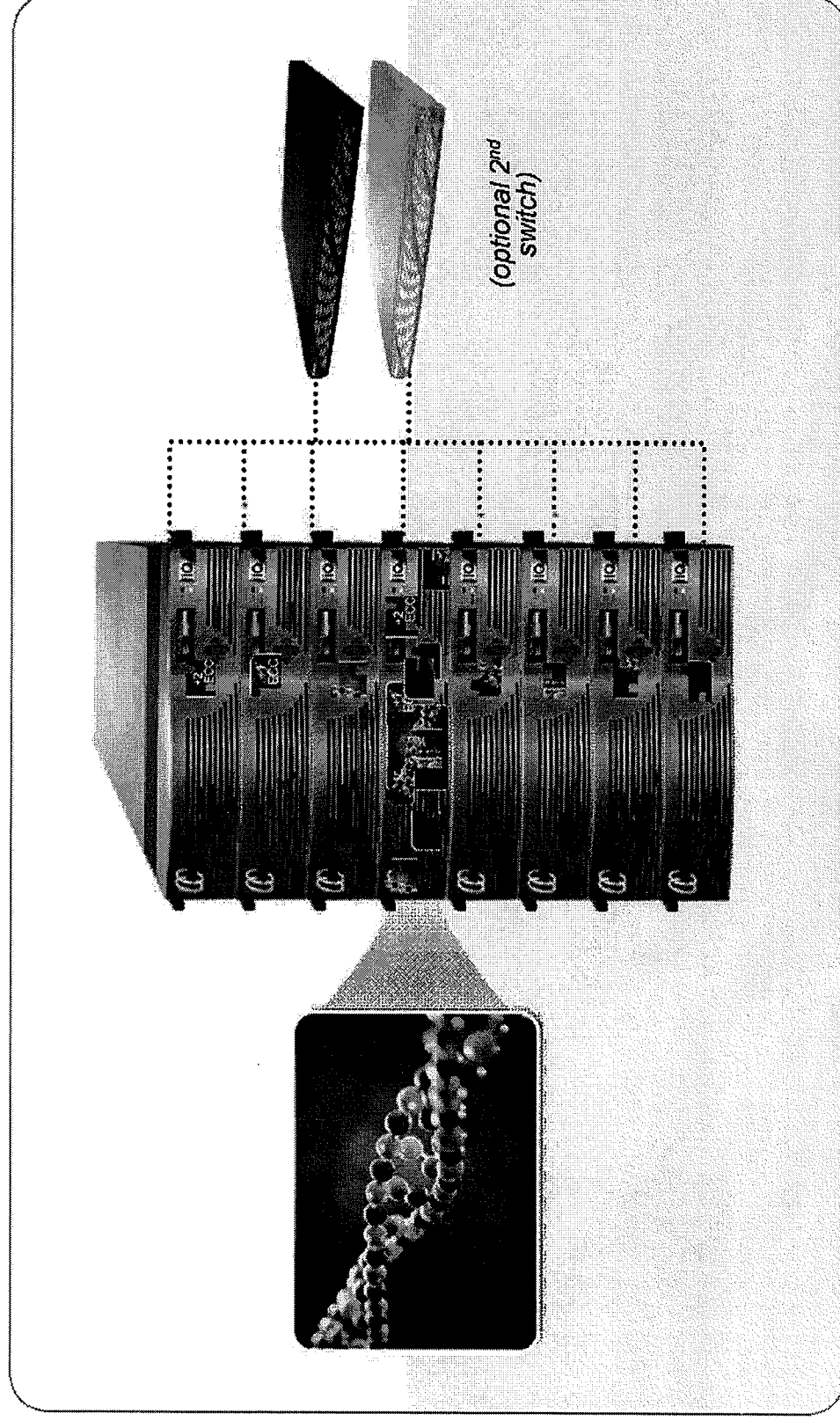
Isilon IQ Network Architecture



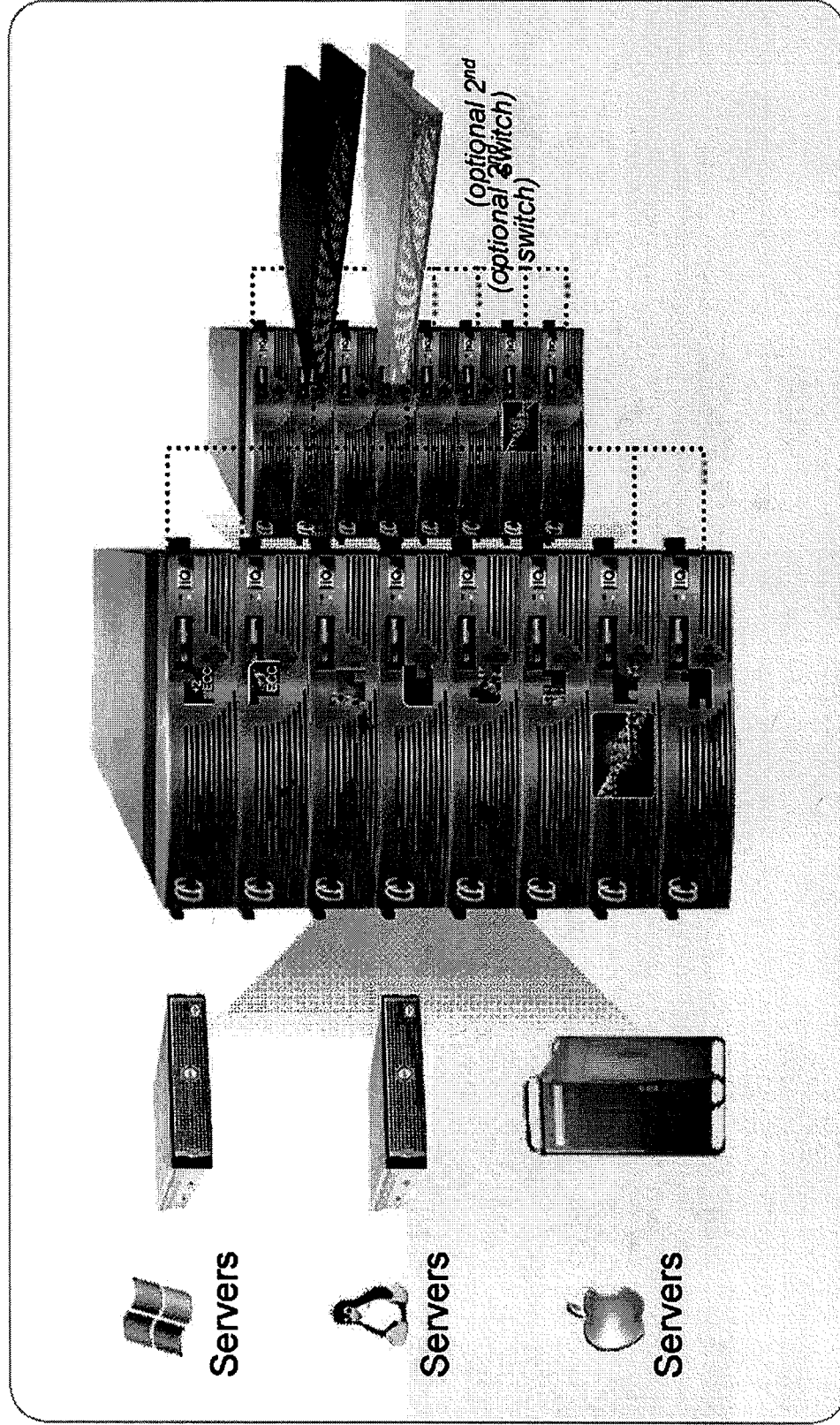
Writing a File with Isilon IQ



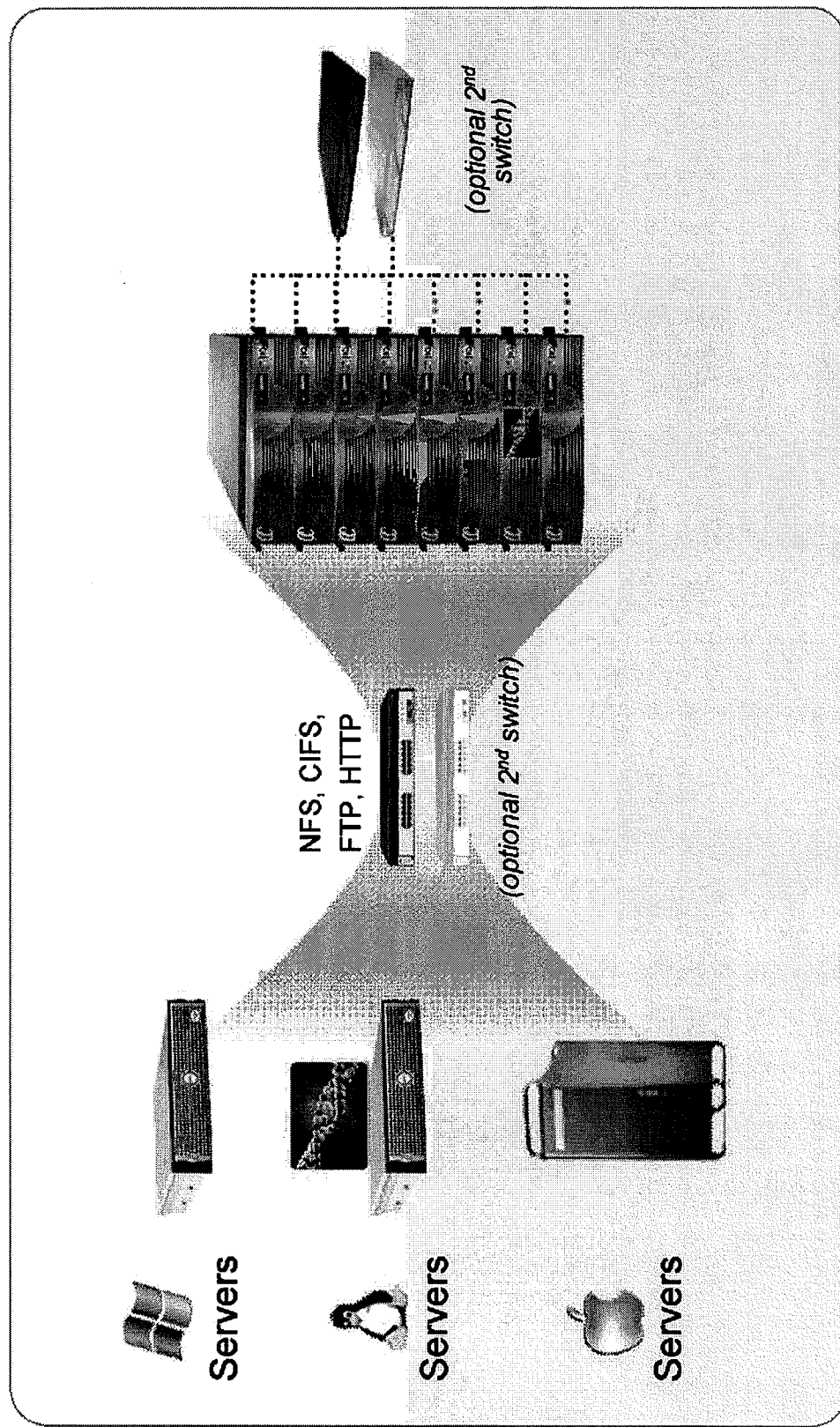
Writing a File with Isilon IQ



Redundant RAID with the OSILON



Reading a File with Isilon IQ





Isilon Clustered Storage

Massive **Scalability** – 100x Larger File Systems

Unmatched **Performance** – 20x Higher Total Throughput

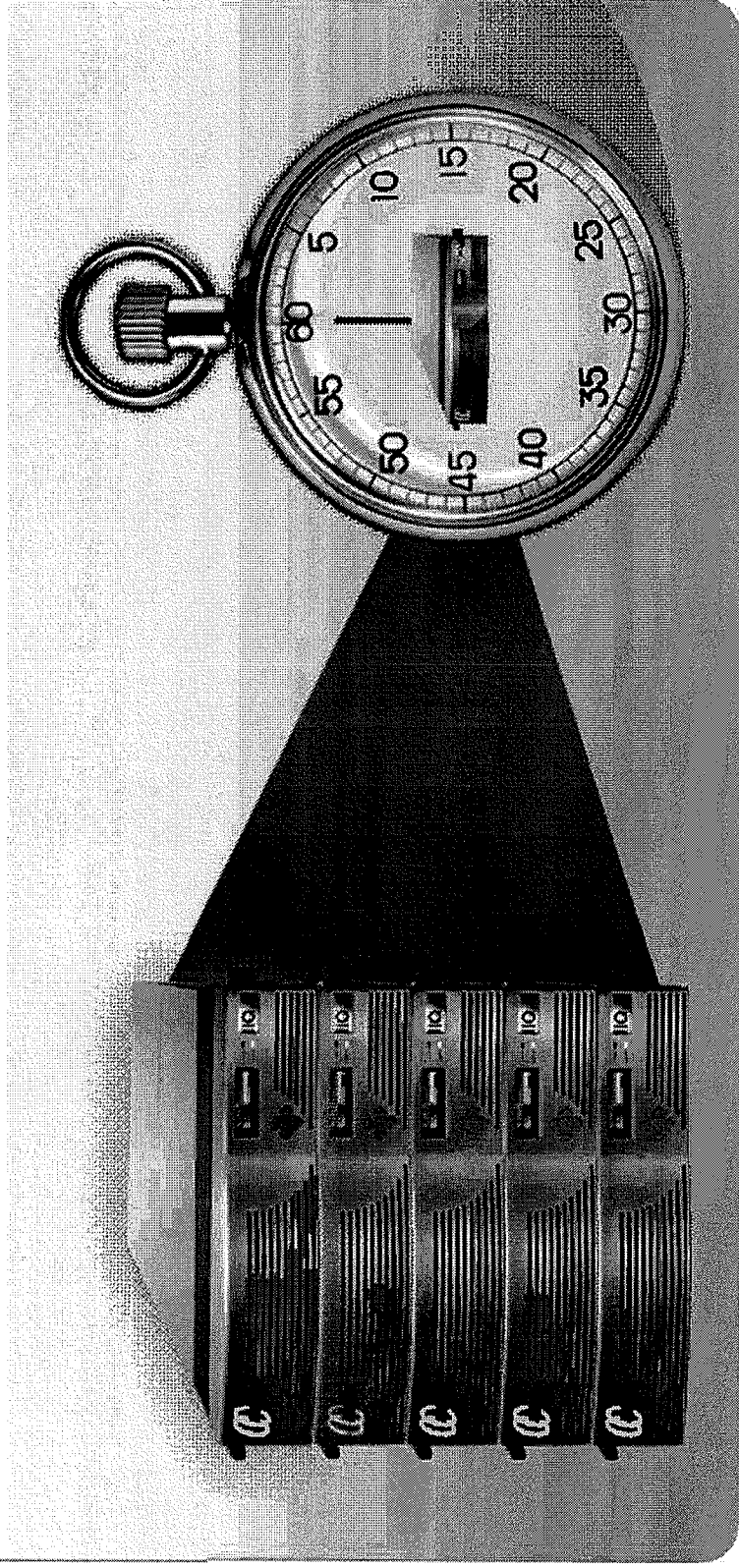
Industry-leading **Reliability** and **Self-Healing**

As **Easy to Manage** 1000+ Terabytes as 1 Terabyte

Largest and Most Scalable File System 100X More Scalable than Traditional Storage Systems

OneFS™ can scale from 4 to over 1600 TB in a single file system

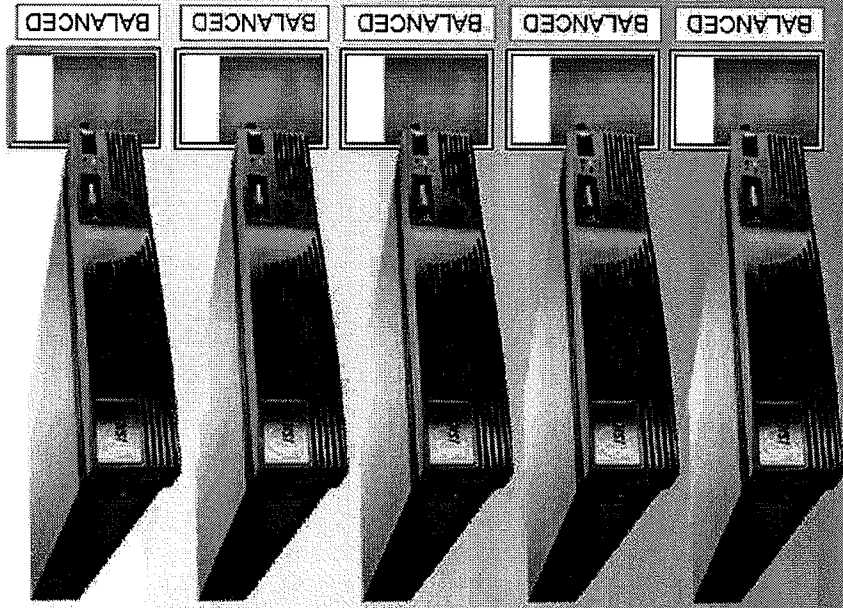
- EMC and NetApp limited to 2-16TB max file system
- Under 60 seconds to scale with no downtime**
- World's fastest performance and capacity scaling



Largest and Most Scalable File System

AutoBalance: Automated data balancing across nodes

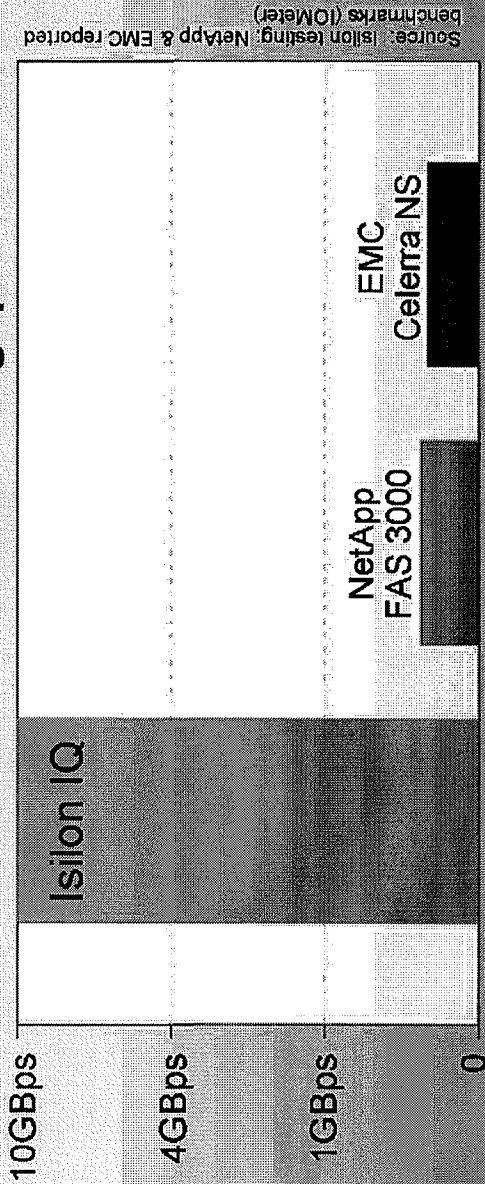
- Reduces costs, complexity and risks for scaling storage
- AutoBalance migrates content to new storage nodes while system is online and in production
- Requires NO manual intervention, NO reconfiguration, NO server or client mount point or application changes



Unmatched Single File System Performance 20X More Throughput than Traditional Storage Systems

- Throughput is more important than IOPS for unstructured data**
- Traditional storage and file systems are optimized for IOPS
 - Isilon delivers over 10GBps of throughput from a single file system**
 - EMC and NetApp NAS can only do 250-400MBps

Maximum Total Throughput



Sequential Concurrent Reads (CIFS)

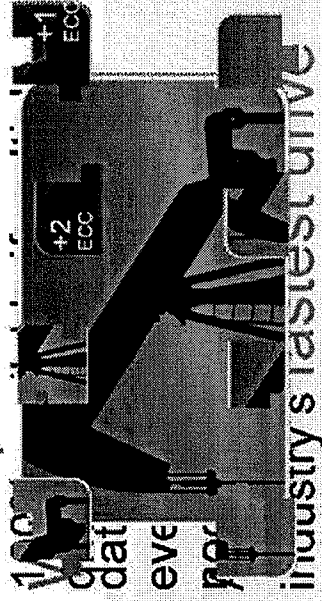
Source: Isilon testing; NetApp & EMC reported benchmarks (fIOmeter)

The Most Reliable Storage System

Built-in high availability clustered architecture

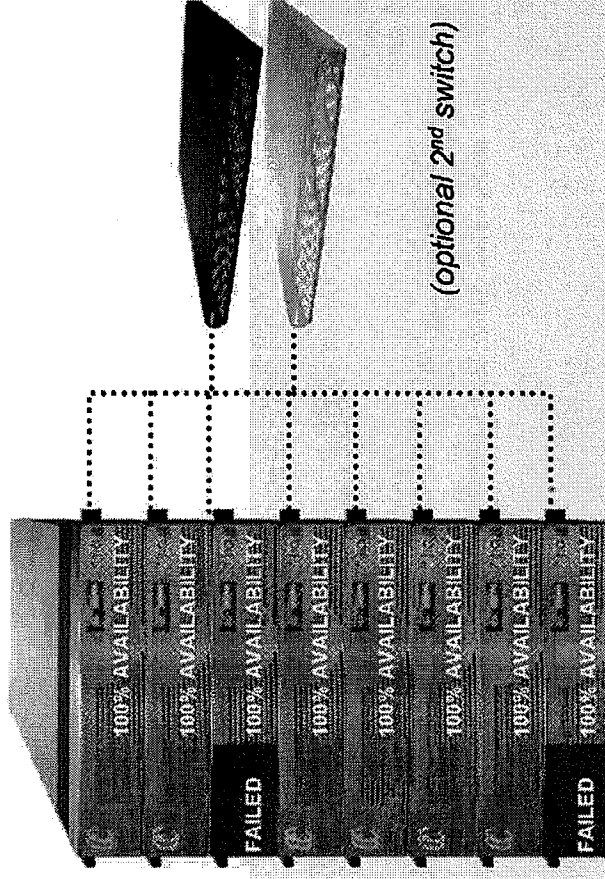
- EMC and NetApp require costly, redundant heads and software

With N+2, N+3, and N+4 protection, data is



rebuild times—

In less than an hour!

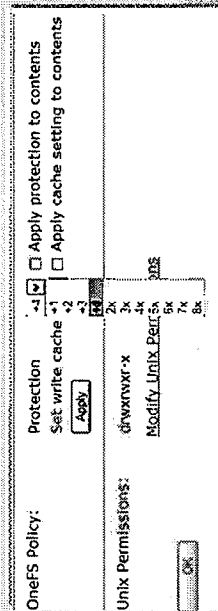
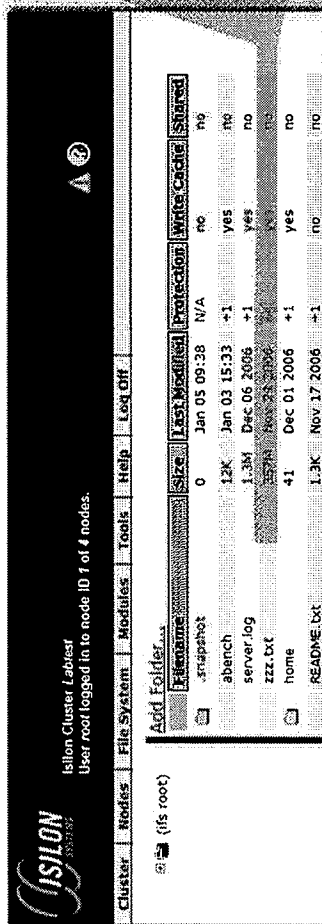


(optional 2nd switch)

The Most Available Storage System

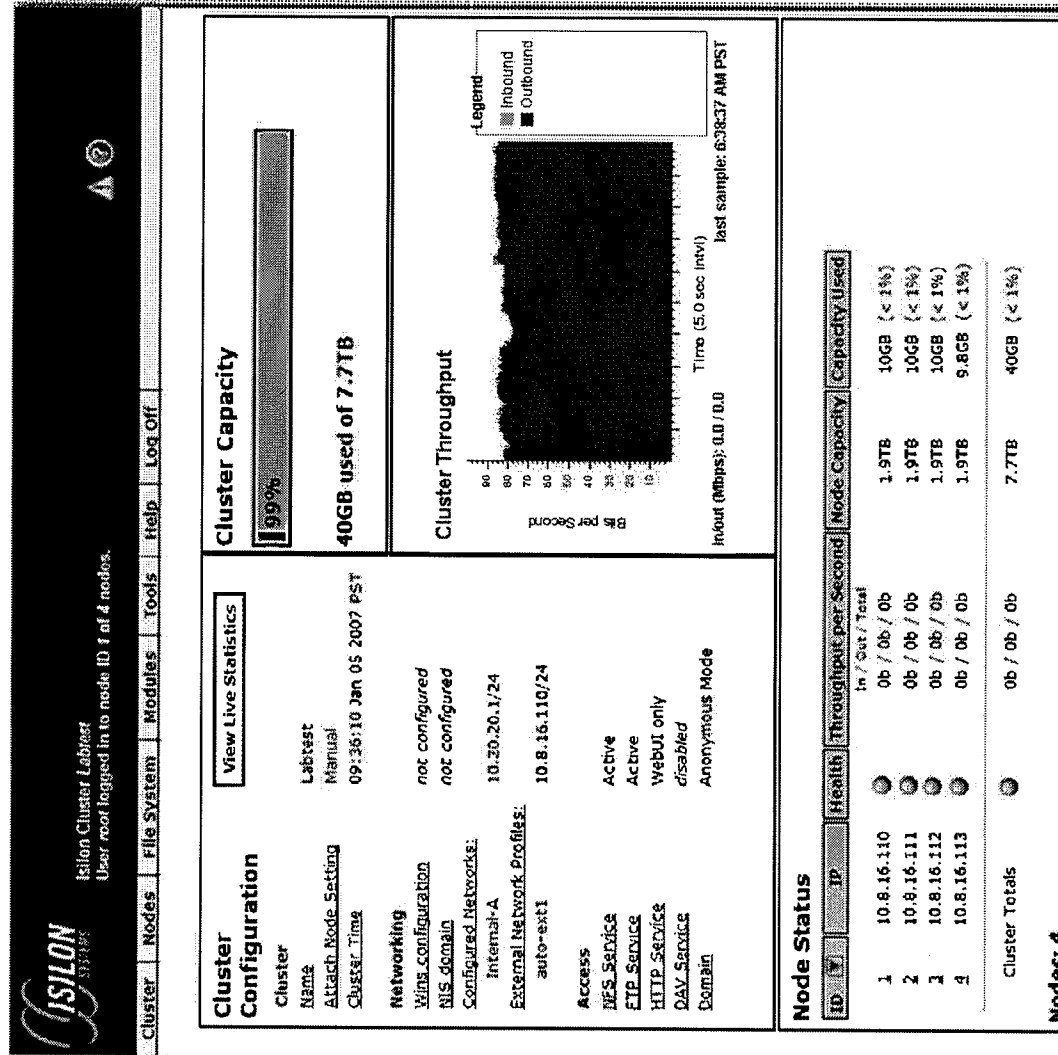
FlexProtect-AP: Policy Based Data Protection

- **FlexProtect-AP™** allows protection changes to be made in real time
- Protect content based on organizational needs
- Ensure availability, even in the event of a disk or node failure



**Configurable at the
Cluster, Directory or
Individual File Level**

Easiest Storage System to Manage



Single-level of Management

Manage 4-1600TB single file system from one intuitive console

"Isilon has made some very bold claims with respect to its clustered storage products - not least the idea of genuinely revolutionizing the ease and speed with which mass storage - over 500 Terabytes - can be added and managed thereafter. We have conducted rigorous testing and unanimously agree with their assertions. This stuff is almost frighteningly simple to use."

Steve Broadhead, Founder, Broadband-Testing Laboratories

Suite of Clustered Storage Software Applications

SnapshottIQ™

Data Protection

- Simple, scalable and flexible data protection with **SnapshottIQ**

SmartConnect™

Data Management

- Policy-based load balancing with failover with **SmartConnect**
- Quota management and thin provisioning with **SmartQuotas**

SmartQuotas™

MigrationIQ™

Data Migration

- Automated content migration across storage tiers with **MigrationIQ**

SyncIQ™

Data Replication

- Fast and flexible file-base asynchronous replication with **SyncIQ**

Aspera for Isilon IQ™

High-Performance Content Delivery

High performance wide area file and content delivery with **Aspera for Isilon IQ**

- SnapshotIQ is a software application that leverages OneFS and Isilon's clustered architecture
- Facilitates frequent, near instantaneous, low-impact, user-recoverable backup of data
- First line of defense against local data corruption, accidental deletion (i.e. "fat finger deletion"), or modifications
- Snapshots vastly improve the frequency and granularity of backups/restore



Isilon

- Unlimited number of snapshots
- 1,024 snapshots per directory
- Cluster, directory or sub-directory
- User-recoverable files via Shadow Copy Services
- No storage reserve space
- Snapshots take under one second

Traditional

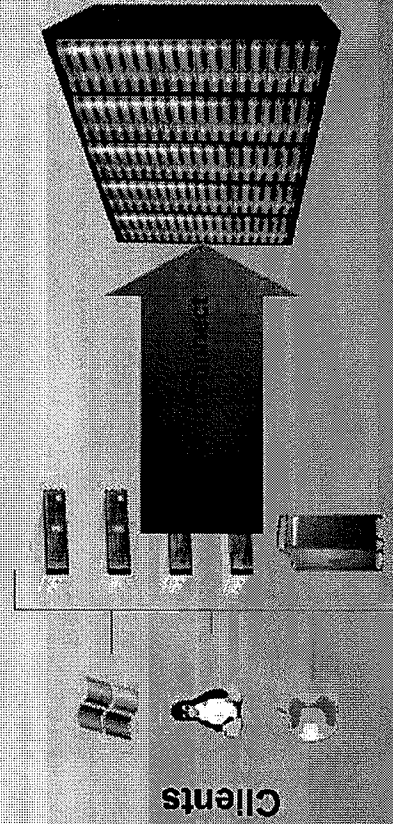
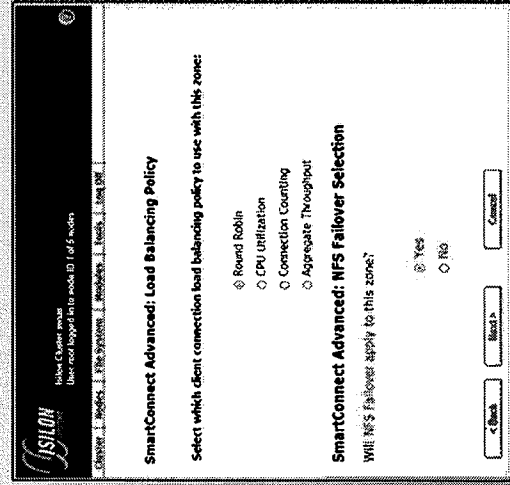
- Limited to number of volumes
- 255 per volume
- Volume only
- System administrator required
- Requires reserves = reduced storage
- Snapshots take under one second

"Isilon's SnapshotIQ is far more robust and flexible than snapshot implementations we have used from other vendors."

David Kirchoff, IT Manager, Brigham Exploration

SmartConnect Advanced software application provides seamless enterprise storage access to an Isilon IQ cluster

- Client Connection: Load balancing based on intelligent policies
- Redundant: Dynamic failover of NFS client connections between nodes
- Performance: Zoning for priority user, group & application optimization



Isilon

- Policy-based load balancing to single file system
- N-way failover
- Minimal performance impact during failure
- No client side drivers or network changes
- Performance QOS with Zones
- Automatic client/node scalability with no changes
- Automated performance re-balance

Traditional

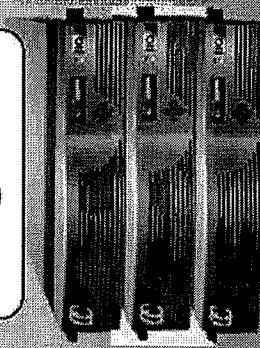
- Single device, multiple file systems
- 2-way failover only
- 50% performance drop during failure
- Requires client side driver or switch
- No QOS control
- Significant management required to scale
- Manual monitoring and re-configuration

The Result: Optimized clustered storage access and availability

MigrationIQ is a software application that automates, simplifies and optimizes content migration across multiple tiers of clustered storage

- Automatic: Intelligently migrates content from Tier-1 to Tier-2 storage
- Simple: Easy to configure, self managing and seamless to end user
- Optimized: Cluster-aware design and maximum storage utilization / ROI

ISILON
IQ1920



Tier 1:
Primary Cluster

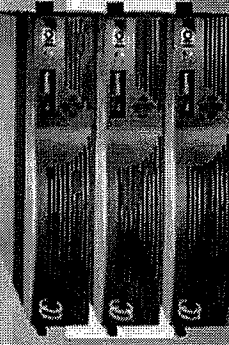
MigrationIQ File Criteria

Define criteria for migrating specific files you want to migrate to reduce:

File Name	File Size	File Type	File Age	File Location	File Status	File Action
File 1	10 MB	PDF	10 days	10 MB	10 MB	10 MB
File 2	10 MB	PDF	10 days	10 MB	10 MB	10 MB
File 3	10 MB	PDF	10 days	10 MB	10 MB	10 MB
File 4	10 MB	PDF	10 days	10 MB	10 MB	10 MB
File 5	10 MB	PDF	10 days	10 MB	10 MB	10 MB
File 6	10 MB	PDF	10 days	10 MB	10 MB	10 MB
File 7	10 MB	PDF	10 days	10 MB	10 MB	10 MB
File 8	10 MB	PDF	10 days	10 MB	10 MB	10 MB
File 9	10 MB	PDF	10 days	10 MB	10 MB	10 MB
File 10	10 MB	PDF	10 days	10 MB	10 MB	10 MB

Buttons: Back, Next, Cancel

ISILON
IQ6000



Tier 2:
Secondary Cluster

Unique Advantages

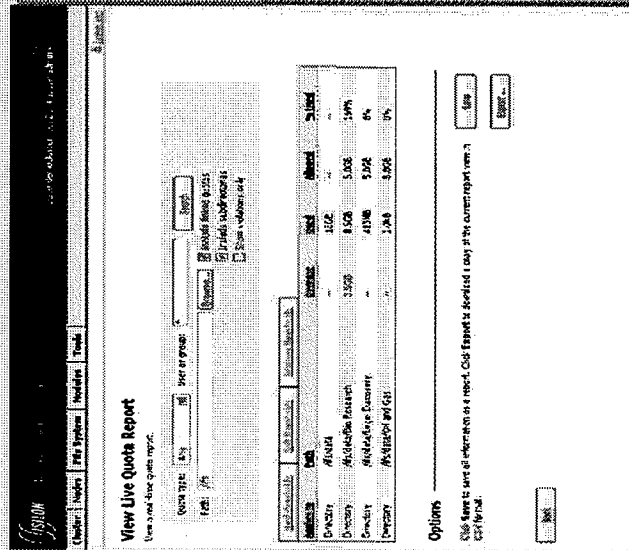
MigrationIQ

- Multi-Tier: Enables true tiered clustered storage
- Flexible: Support for cluster, directory and sub-directory
- Robust: Policy engine (a*time, file type, age and size) supported
- Cluster aware: All nodes participate in migration jobs
- Efficient: Bandwidth and resource tunable
- Intelligent: "Pre-migration" assessment for optimal deployment
- Seamless: "Short-cut" access to migrated content

Quota Management and Thin Provisioning

Simple, scalable & flexible management for clustered storage

- Data management and provisioning feature of Isilon's OneFS operating system software
- Partition and control your cluster (single pool) usage exactly the way you want, on the fly
- Industry-leading flexibility
 - Cluster, directory, subdirectory, user and group
 - Hard, soft and advisory thresholds
- Robust storage provisioning
 - Thin provisioning and oversubscription
 - Manage user exposure to capacity



Isilon

Easy to administer, single pool

Granular control at the user, group, directory, sub-directory levels

Manage and reconfigure on the fly

Quota management and thin provisioning in a single application

OneFS provides "pay as you grow" scalability in less than 60 seconds

Traditional

- Complexity. Manage users across multiple volumes and file systems
- Volume-level solutions are difficult to reconfigure once set up
- Difficult and expensive to adapt to changing organizational demands
- Downtime to scale capacity

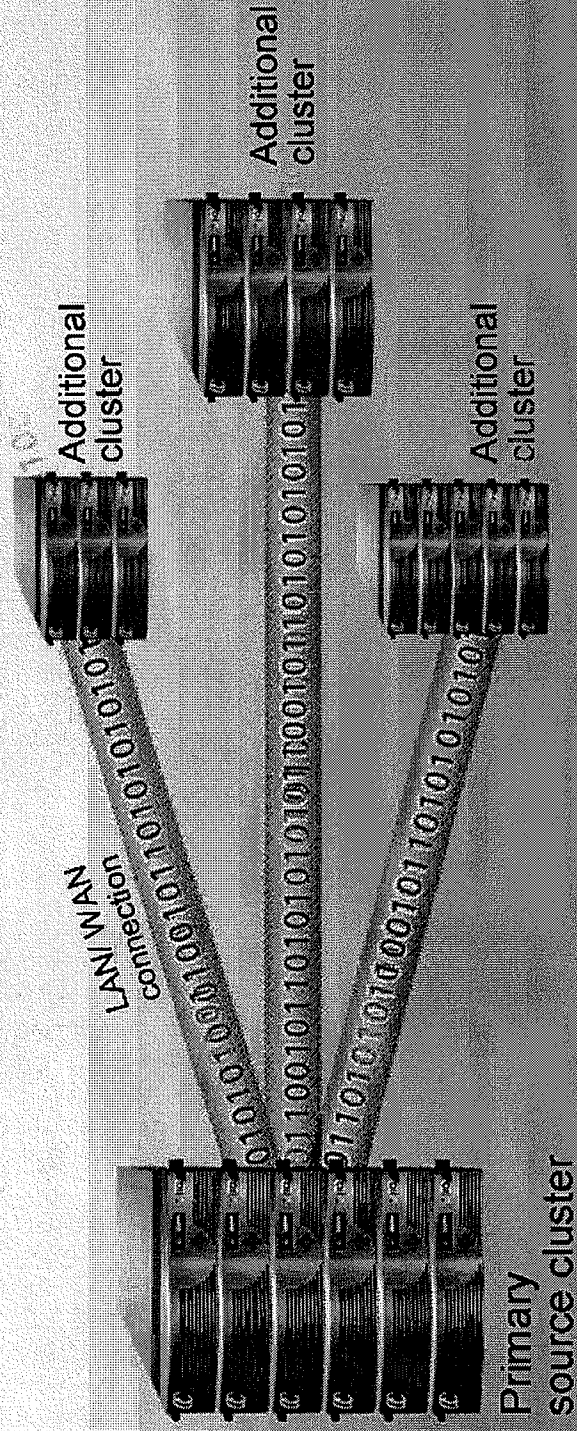
"We tested Isilon's suite of clustered storage software applications and have concluded that Isilon is way out in front of the pack in meeting the access, protection, management and availability requirements for storage growth in the enterprise."

Steve Broadhead, Founder and Director of Broadband Testing Laboratories

Asynchronous File-based Replication

SyncIQ is a software application that delivers file-based, asynchronous replication for DR, D2D backup and distributed workflow

- Enterprise-wide: One-to-many replication locations throughout enterprise
- Flexible: Choose what/when content to replicate based on policy engine
- Intelligent: Cluster-aware design delivers unmatched performance



Isilon

- File-based replication for unstructured data
- Cluster aware: All nodes participate
- Granular: Cluster, directory & file level
- Time to replicate = LOW (all nodes participate)
- Bandwidth and resource tunable

Traditional

- Block based for transactional data
- Single device
- Volume based only
- Time to replicate = HIGH (single device)
- Not bandwidth aware, floods single device

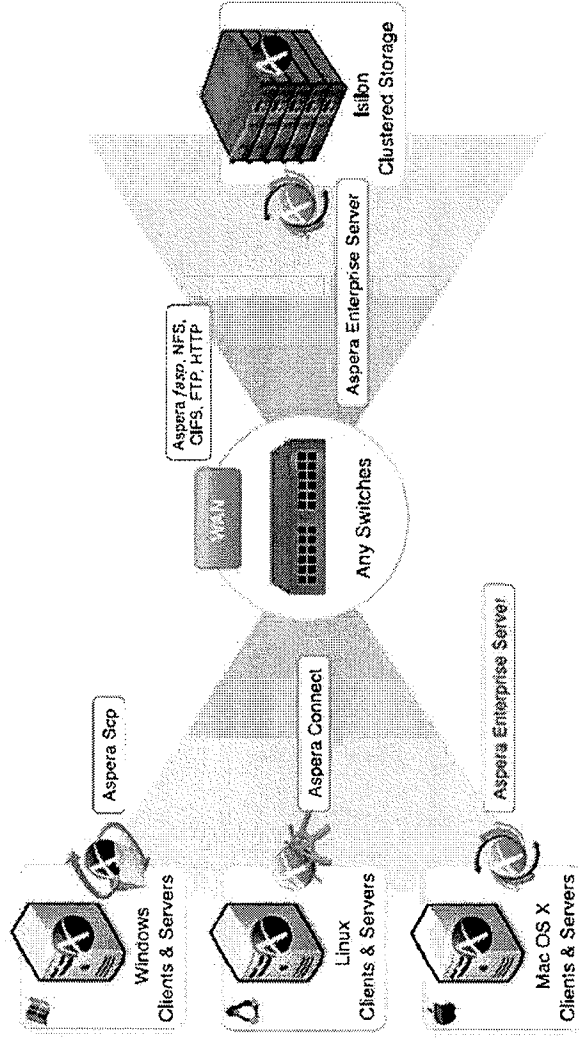
"We are amazed by the simplicity and performance of Isilon IQ as well as the ease with which we are able to replicate files between data centers using SyncIQ."

Greg Robinson, Solutions Architect, Clear Channel



Aspera for Isilon IQ™

High-Performance Wide Area File and Content Delivery



Fasp Clients

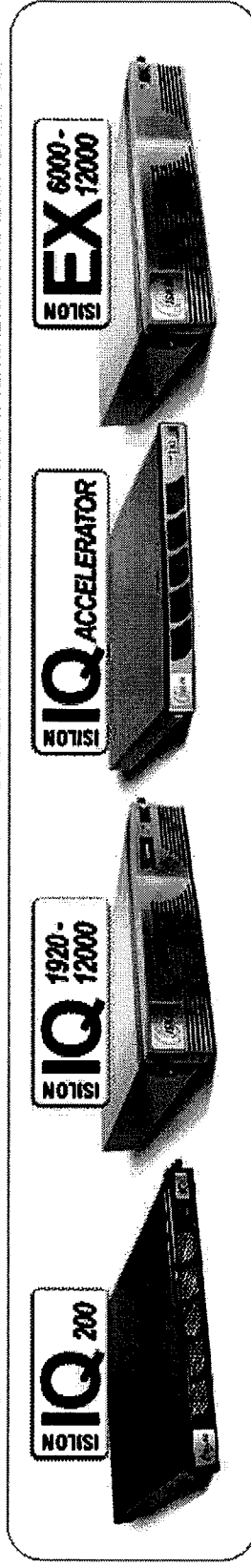
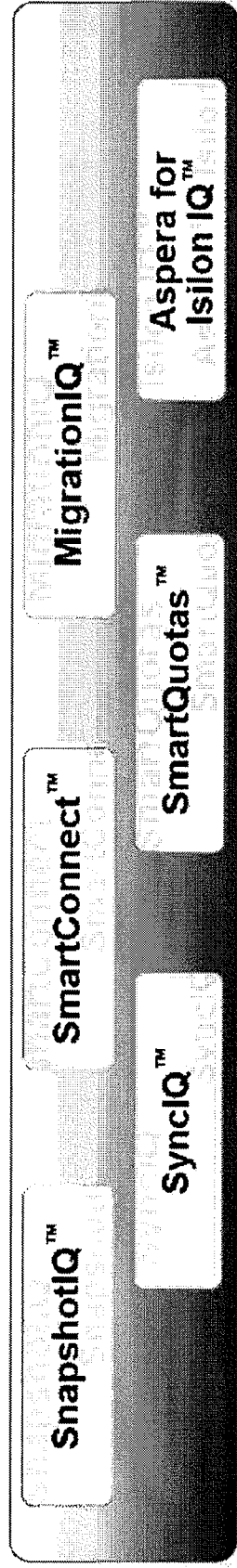
IP Network

Aspera Enterprise Server for Isilon IQ

- Speeds file transfers across any wide area network—slow or fast
- Scales beyond the limits of a single-head storage system
- Supports interoperability between Windows, Mac, Linux, Isilon
- Ensures predictable speeds and transfer times
- Reduced infrastructure costs as software lives on Isilon clustered storage



Complete End-to-End Product Line



OneFS

...makes Isilon the first and only
enterprise-class clustered storage solution

Isilon Overview

- Global leader in clustered storage space
- Unrivaled product innovation
- World-class manufacturing and global services
- Strong ecosystem of technology partners

"Isilon continues to lead where no one has gone before"

- Steve Duplessie, Founder, Enterprise Strategy Group

Customer Examples

Kodak EasyShare Gallery

- 25 million users access 2 billion images

CEDARS-SINAI®

- 60GB of data per drop of blood



Pratt & Whitney

A United Technologies Company

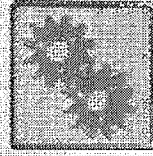
- 100,000 data samples per second

- Eliminated separate silos of data

- Reduced time from 6 months to 6 weeks



Manufacturing



Summary

Why Choose Isilon for Your Unstructured Data Storage Needs?

Criteria	Isilon	NAS/SAN/Other
<i>Designed specifically for unstructured data?</i>	YES	NO
<i>Huge, expandable single file system/volume?</i>	YES	NO
<i>Scalable throughput – up to 10 GBps?</i>	YES	NO
<i>Ultra high reliability and availability?</i>	YES	NO
<i>Simple, easy to use and pay as you grow?</i>	YES	NO
<i>Economics, Productivity, IT Leverage?</i>	YES	YES – Traditional Data NO – Unstructured Data
<i>Leader in Clustered Storage?</i>	YES	NO



Demonstration